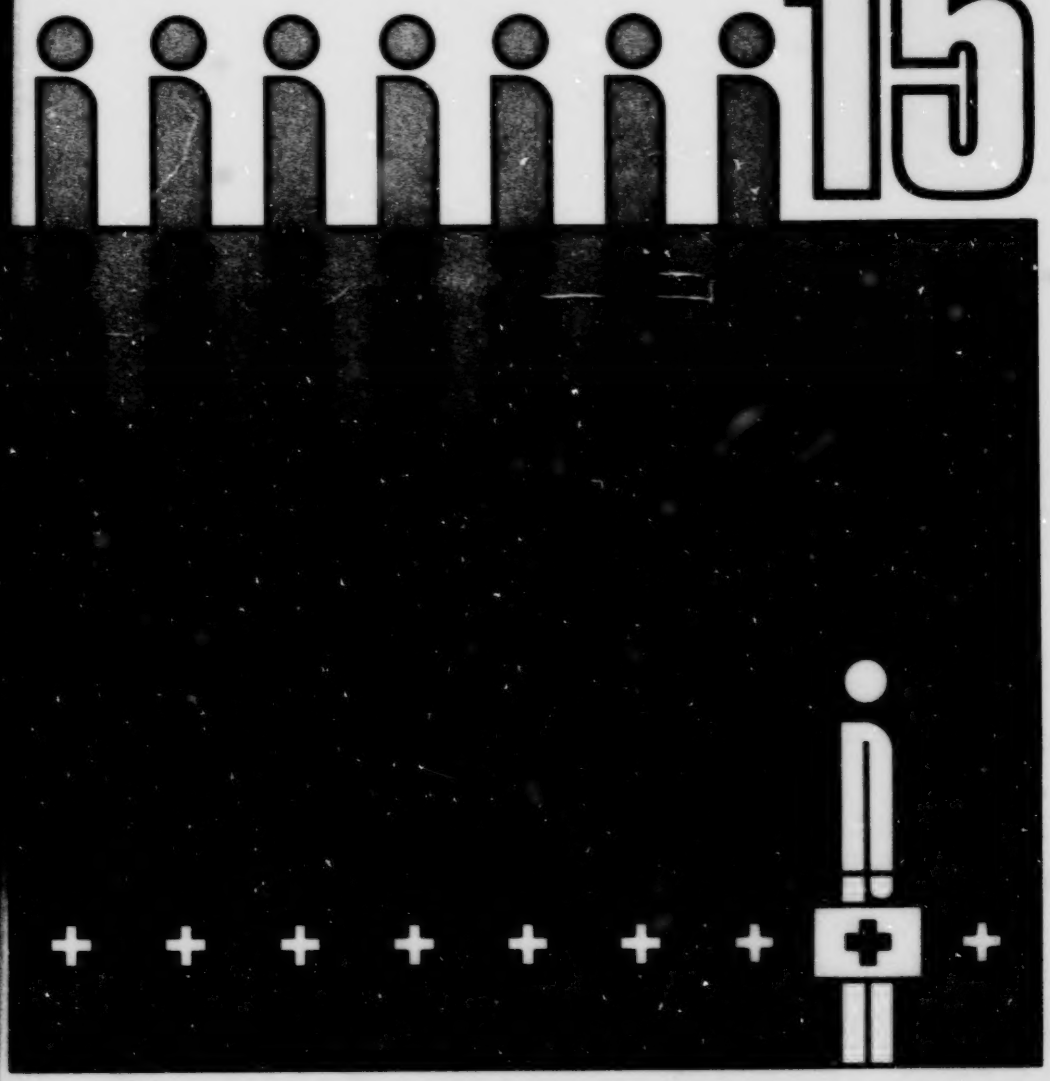
IDRC-230e

SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME 15



84- 5060

The International Development Research Centre is a public corporation created by the Parliament of Canada in 1970 to support research designed to adapt science and technology to the needs of developing countries. The Centre's activity is concentrated in five sectors: agriculture, food and nutrition sciences; health sciences; information sciences; social sciences; and communications. IDRC is financed solely by the Parliament of Canada; its policies, however, are set by an international Board of Governors. The Centre's headquarters are in Ottawa, Canada. Regional offices are located in Africa, Asia, Latin America, and the Middle East.

To our readers: Please remember that individual SALUS microfiches can be ordered using the coupons at the back of the bibliography. Since this bibliography is generated by computer, the SALUS data base is also available on magnetic tape in ISO format 2709. Institutions in developing countries with appropriate computer systems may wish to have a copy of the data base in order to provide services more responsive to the needs of local users than those we can provide here in Ottawa. In addition, IDRC can offer a complete set of microfiches to institutions with suitable copying and distribution facilities. For more information on any aspect of SALUS, please write to: *SALUS Manager, IDRC, P.O. Box 8500, Ottawa, Canada K1G 3H9.*

© International Development Research Centre 1984
Postal Address: Box 8500, Ottawa, Canada K1G 3H9
Head Office: 60 Queen Street, Ottawa

Bechtel, R.M.

IDRC, Ottawa CA

IDRC-230e

SALUS: low-cost rural health care and health manpower training: an annotated bibliography with special emphasis on developing countries, volume 15. Ottawa, Ont., IDRC, 1984. 145 p. (700 abstracts).

/Annotated bibliography/, /health services/, /health manpower/, /rural areas/, /developing countries/ — /vocational training/, /medical education/, /health education/, /health planning/, /family planning/, /appropriate technology/.

UDC: 016:613

ISBN: 0-88936-425-7
ISSN: 0824-8672

Microfiche edition available

IDRC-230e

SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

An annotated bibliography with special emphasis on developing countries

Volume 15

Editor: Rosanna M. Bechtel

Abstracts written by: Rosanna M. Bechtel, Elisabeth Bollinger, Hope Cadieux-Ledoux, Dianne V. Kalbfleish, and David Paul-Elias

(This is the fifteenth in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes are published irregularly.)

Contents

Preface 5

Abbreviations and Acronyms 7

I Reference Works 9

II Organization and Planning 11

- 1 Health workers 11
- 2 Organization and administration 13
- 3 Planning 17
- 4 Geographical distribution of health services and workers 26
- 5 Financial aspects 26
- 6 Cultural aspects 27
- 7 Epidemiological, family planning, maternal child health, nutrition, and disease control studies 30

III Health Care Implementation 45

- 1 Inpatient care 45
- 2 Outpatient care 46
- 3 Mobile units and services 48
- 4 Health education 49
- 5 Appropriate technology 51

IV Health Workers — Training and Utilization 54

- 1 Medical personnel 54
  - 1 Professional 54
  - 2 Auxiliary 56
- 2 Nursing personnel 57
  - 1 Professional 57
  - 2 Auxiliary (no entries in this volume)
- 3 Midwives and family planning workers 57
  - 1 Professional 57
  - 2 Auxiliary 57
- 4 Dental personnel 58
  - 1 Professional 58
  - 2 Auxiliary (no entries in this volume)
- 5 Laboratory and X-ray technicians 58
- 6 Environmental health workers 59
- 7 Occupational and physical therapists 59
- 8 Health educators (no entries in this volume)
- 9 Teaching aids 59
  - 1 Health care, nutrition, and disease control 59
  - 2 Family planning and midwifery 65

V Formal Evaluative Studies 66

- 1 Health workers 66

2 Organization and administration 67
3 Planning 77
4 Geographical distribution of health services and workers 79
5 Financial aspects 81
6 Cultural aspects 83
7 Epidemiological, family planning, maternal child health, nutrition, and disease control studies 87

Author Index 117

Subject Index 128

Geographic Index 143

Preface

I would like to remind users who are unable to obtain, through their regular channels, copies of documents cited in SALUS bibliographies or searches to apply to the nearest depository on the following list. Each of these institutions has received a set of the SALUS microfiches and has the facilities to make microfiche and/or hard copies available. Users not yet served by a depository can still obtain microfiches directly from IDRC by using the coupons at the back of this bibliography. Requests for searches of the data base should be sent to the SALUS Manager.

Library
Atma Jaya Research Centre
P.O. Box 2639/jkt
Jakarta, Indonesia

Biblioteca Regional de Medicina
Organização Pan-Americana de Saude
Caixa Postal 20381
Vila Clementino
São Paulo, Brasil CEO 04023

National Health Library and
Documentation Centre
Institute of Public Health Complex
Mohakhali
Dacca 12, Bangladesh

Centro de Documentaçao
Ministério de Saude
Esplanada des Ministérios - Bloco G
70058 Brasilia, DF, Brasil

National Medical Library
Directorate General of Health Services
Ansari Nagar, Ring Road
New Delhi 110029, India

Department of Community Medicine
Faculty of Medicine
University of Khartoum
P.O. Box 102
Khartoum, Sudan

The Library
Faculty of Medicine
Chiang Mai University
Chiang Mai 50000
Thailand

Library
South Pacific Commission
Post Box D5
Noumea Cedex, New Caledonia

Many thanks as always to the abstractors and to Lois Fitzpatrick and Denis Sing for their help in the preparation of this volume.

Rosanna M. Bechtel
SALUS Manager
Information Sciences

Abbreviations and Acronyms

AID — Agency for International Development
APHA — American Public Health Association
BCG — Bacillus Calmette-Guerin
C — Centigrade
Cl — chlorine
cm — centimetre(s)
CNS — sulfocyanate
dB — decibel
DDT — dichlorodiphenyltrichloroethane
dl — decilitre
DPT — diphtheria-pertussis-tetanus
Engl — English
FAO — Food and Agriculture Organization
FEPAFEM — Federación Panamericana de Facultades de Medicina
Fren — French
g — gram(s)
Hb — haemoglobin
Hz — hertz
IgE — 0.03 mg serum concentration: 100 ml immunoglobin
K — potassium
kcal — kilocalorie(s)
kg — kilogram(s)
km — kilometre(s)
l — litre
mg — milligram(s)
ml — millilitre(s)
mm — millimetre(s)
Na — sodium
PAHO — Pan American Health Organization
Ph — phenyl
Russ — Russian
Span — Spanish
TALC — teaching aids at low cost
UK — United Kingdom
UN — United Nations
UNDP — United Nations Development Programme
UNICEF — United Nations Children's Fund
US (USA) — United States of America
USSR — Union of Soviet Socialist Republics
VDRL — Venereal Disease Research Laboratory
WHO — World Health Organization

I Reference Works

09801 *Marketing infant formula: a bibliography.* London, War on Want, n.d. 125p. Engl.

This bibliography forms part of War on Want's continuing efforts to encourage appropriate infant feeding practices. Its intention is to provide a reference source to publications that study the issue of infant feeding in the broader context of world poverty and economic dependence and to alert researchers to efforts undertaken in support of self-reliance and community development. Entries are grouped by manufacturer and by geographical region (sometimes by country) and contain author, title, and source information with occasional brief abstracts; another section covers marketing and the marketing code. There are concept, companies, and linguistic indices and an address list. (DP-E)

09802 **Baumslag, N., Kinsey, C., Sabin, E.** *Breast is best; a bibliography on breast feeding and infant health.* Washington, D.C., US AID, Aug 1978. 48p. Engl. Refs.

Both abstracted and unannotated references are grouped under headings representing the issues the compilers considered the most essential to breast-feeding: lactation and reproduction, the quality and quantity of breast milk, chemical contamination of breast milk, the infant food market, maternal nutrition, mortality and morbidity, promotion of breast-feeding, weaning, and general topics. All entries contain title, author, and source information. (DP-E)

09803 **Carr, M.** *Economically appropriate technologies for developing countries: an annotated bibliography. Rev. ed.* London, Intermediate Technology Publications, Feb 1981. 123p. Engl. Refs.

See also entry 2905 (volume 5).

This annotated bibliography contains some 300 references to publications on the economic aspects of intermediate technology and, especially, its economic appropriateness for developing countries. The material is grouped under the following headings: agriculture; low-cost housing and building materials; manufacturing; infrastructure; and handbooks, manuals, buyers' guides, and technical publications. Health and water supply and sanitation, 13 and 17 items, respectively, are dealt with under infrastructure. (HC-L)

09804 **Cliff, J.L.** *Health in Mozambique; a select bibliography 1950-1980.* London, Mozambique, Angola and Guinea Information Centre, 1980. 1v.(various pagings). Engl.

This bibliography contains 357 references to mainly English and Portuguese materials concerning Mozambique but generally published outside that country. Subjects covered include environmental health, community health, communicable and non-communicable diseases, drugs, entomology, malacology, and medical zoology. Entries contain author, title, date, and source information but are not annotated. There are subject and 1st author indices. (DP-E)

09805 **Damien Foundation, Brussels.** *Atlas of leprosy.* Brussels, Damien Foundation, 1981. 205p. Engl.

Information from a variety of sources on the prevalence of leprosy in 95 countries is provided by this atlas, which was produced by the Department of Epidemiology at the University of Louvain, Brussels, Belgium. Maps of each country show the prevalence of the disease by region and the locations of projects supported by the International Federation of Anti-Leprosy Associations (ILEP). These are accompanied by statistical tables for each country indicating (a) population by region, (b) number of registered patients, (c) prevalence, and (d) number of patients in ILEP-supported projects. (Modified journal abstract)

09806 **FAO, Rome.** *Evaluation of nutrition interventions: an annotated bibliography and review of methodologies and results.* Rome, FAO, 1980, 108p. Engl. 243 refs.

Approximately 110 items on the methodology of evaluation and 300 items describing the outcome of nutrition interventions have been included in this 2nd edition of an annotated bibliography, produced by FAO in Rome to make existing information on this subject more widely known. Bibliographic information for each item is given and the contents are summarized; a comment is made on the item's value to programme planners and evaluators. Evaluation methodology covers areas such as purpose, problems, impact, survey procedures, indicators, measurements of knowledge, behaviour, food consumption, and cost-effectiveness. Evaluation reports include studies on nutrition education, feeding programmes, nutrition planning and policies, food fortifications, and supplements. An author/source and a country/area index are included. (EB)

09807 **Federación Panamericana de Asociaciones de Facultades de Medicina, Caracas.** *FEPAFEM informa. (FEPAFEM reports).* Caracas, Federación Panamericana de Asociaciones de Facultades de Medicina. Span.

Published every other month in alternation with FEPAFEM's bulletin, this report is intended to keep the national affiliates informed of the activities of both headquarters and other members in the areas of general coordination, medical education and medical schools, and medical education and health services. Executive decisions, excerpts from conference proceedings, and news items from member nations are typical of the contents of a sample edition. (RMB)

09808 **Haupt, A., Kane, T.T.** *Guide de démographie du Population Reference Bureau, Inc.; edition de l'Océan Indien; une introduction pratique à la dynamique de la population conçue expressément pour les journalistes, professeurs, étudiants, et les autres personnes qui s'intéressent aux phénomènes de population. (Population Reference Bureau's population handbook; Indian Ocean edition; a practical introduction to population dynamics intended expressly for journalists, teachers, students, and others interested in population phenomena).* Washington, D.C., Population Reference Bureau, 1981. 78p. Fren. Refs.

The 1st part of this handbook describes geographic and demographic features of the Indian Ocean islands of Madagascar, the Comoros, Mauritius, Réunion, and the Seychelles. It presents population dynamics as they pertain to the following: population composition, fertility, mortality, morbidity, nuptiality, migration, urbanization and distribution, and population movement. Included are several maps, graphs, a trilingual thesaurus of demographic terminology, and a list of international organizations active in demographic research. (EB)

09809 **Montague, J., Montague, S., Capparelli, E.** *Primary health care bibliography and resource directory.* Washington, D.C., American Public Health Association, 1982. 67p. Engl.

This companion volume to APHA's primary health care series contains 519 references divided into an annotated bibliography and a resource directory. The entries in the bibliographical sections are grouped according to these subject areas: health care in developing countries, planning and management of primary health care, manpower training and utilization, community participation and health education, delivery of health services, and auxiliary services. The directory comprises periodicals, reference resources on primary health care, educational aids and training programmes, procurement of supplies and pharmaceuticals, and international and private donor resources. Bibliographical entries contain title, author, source, date, price, and an abstract; some include a brief description and address of the organization or programme mentioned. There are author, organization, geographical, and subject indices. (DP-E)

09810 **Walt, G., Vaughan, P.** *Introduction to the primary health care approach in developing countries; a review with selected annotated references.* London, London School of Hygiene and Tropical Medicine, Ross Institute of Tropical Hygiene, Publication No. 13, 1981. 61p. Engl. Refs.

Selected mainly from English-language material published since 1975, these references illustrate the many facets of health and development encompassed by the primary care approach. Separate sections cover health and development, health services planning and organization, manpower planning and training, pharmaceutical policy, community participation, traditional medicine, intersectoral effects, the components of primary health care delivery, and bibliographies. Each entry contains author, title, date, and source information in addition to an abstract. There are an author index and a lengthy preface that examines some of the ideas and concepts affecting our perceptions of primary care and considers the implications of its implementation. (RMB)

II Organization and Planning

II.1 Health Workers

See also: 09831.

09811 Blizard, P.J. *Developing courses in the social and behavioural sciences for Indonesian faculties of medicine.* Jakarta, Ministry of Education and Culture, 1977. 20p. Engl. 32 refs.

This paper briefly outlines the values of curriculum development based on instructional objectives and applies this approach to curriculum planning and design to the task of constructing a course in social and behavioural sciences for medical students. An attempt has been made to identify the basic skills inherent in the social sciences, state an appropriate set of departmental objectives, provide illustrative objectives, and pinpoint three of the more important educational problems associated with the teaching of social and behavioural sciences. (EB)

09812 Blizard, P.J. *Planning, implementing and evaluating workshops in educational science for teacher (sic) in faculties of medicine.* Jakarta, Ministry of Education and Culture, 1976. 22p. Engl.

This bulletin aims to assist medical teachers in planning, implementing, and evaluating workshops by considering the following steps: (1) identification of the major variables to be taken into account in planning a workshop; (2) use of practical ground rules for workshop implementation; and (3) examination of parameters in assessing the effectiveness and the immediate and long-term impact of workshops on the participants. (EB)

09813 Cooper, J.E. *Seminars in China.* World Health (Geneva), Oct 1982, 23-25. Engl.

In taking a new look at psychiatry and the neurosciences, the People's Republic of China has been helped by a series of seminars designed, in collaboration with WHO, to act as catalysts for fresh development in the mental health field. In each seminar, some 100 participants (about 65% from the mental health field) meet together over 12 working days to examine and discuss a variety of topics related to the psychiatric aspects of both Western and traditional medicine. (Modified journal abstract)

09814 Cusins, P. *Training course for general practitioner teachers; experience in Johannesburg, 1978.* South African Medical Journal (Cape Town), 59(2), May 1981, 793-795. Engl.

This paper describes briefly the development of a training programme for general practitioner teachers given in 1978 by the University of Witwatersrand, Johannesberg, South Africa. It outlines some of the issues in planning such a course and ways of presenting it. Consisting of 20 4-hour sessions, the course covered the following topics: interpersonal skills, teaching theory and methods, personal development, evaluation and feedback, syllabus development, research methods, course evaluation, and future planning. In conclusion, the author looks at some of the ethical issues involved. (RMB)

09815 Davies, J. *Medical specialists in Papua New Guinea, 1989: the planned use of doctors and allied health workers.* Papua New Guinea Medical Journal (Port Moresby), 25(3), Sep 1982, 176-181. Engl.

During 1979-1981 the Papua New Guinea Department of Health studied projected health manpower requirements and equitable distribution of manpower by 1989 and formulated a plan that would provide 88 specialist doctors to the country's current 200 doctors and 60 fully-qualified specialists. This article summarizes the planning methods used and describes the main features of the plan, emphasizing the combined use of doctors and allied health workers. Further attention is given to implications of the plan in regard to medical registrars, the policy of localization, and the role of allied health specialists. Three tables of data from the study are included. (EB)

09816 Faibishenko, Y. *Nurses in the USSR.* World Health (Geneva), Jul 1982, 11-13. Engl.

In the USSR, feldsher-midwife units (FMUs), health services teams that provide first aid and primary care, are gradually being replaced by rural district hospitals with improved diagnosis and treatment methods and modern medical equipment. Outpatient clinics providing both general practitioner and specialist services made up a major part of the Soviet public health services system, which employs about 3 million paramedical personnel, including X-ray and other technicians. About 700 medical schools offer a 34-month paramedical course in which up to 70% of the study programme is alloted to

practical training at medical and disease prevention centres. Feldshers and midwives, after having worked 3 years in a given specialty, are encouraged to continue their education. (EB)

09817 **Forssman, S.P.** *Teaching of occupational health and safety.* WHO Chronicle (Geneva), 27(4), 1973, 149-152. Engl.

Also published in French, Russian and Spanish.

The Conference on the Teaching of Occupational Health and Safety, Milan, Italy (1972) covered the following themes: the changing concept of occupational health; the functions of occupational health personnel; occupational health manpower planning; undergraduate, post-graduate, and continuing education for occupational health personnel; training for team work in occupational health; utilization of modern educational media in occupational health; and evaluation of occupational health programmes and services. The training needs of various non-medical personnel (engineers, managers, foremen, students in vocational schools, etc.) regarding the importance of occupational health and its methods were also recognized. (HC-L)

09818 **Fülöp, T.** *Future of WHO's health manpower development programme.* WHO Chronicle (Geneva), 36(1), 1982, 3-6. Engl.

Also published in French, Russian, and Spanish.

Analysis of WHO's health manpower development programme after 32 years has produced a number of recommendations concerning its long-term implementation and adaptation. It is suggested that activities at the international level be grouped into three areas: technical cooperation, coordination, and monitoring and evaluation. There is also an emphasis on political decisions aimed at enhancing the relevance of health manpower development policies and programmes. (DP-E)

09819 **Huang, C.S.** *Medical education in China; historical background, present status, and further development.* American Journal of Surgery (New York), 143(6), Jun 1982, 660-663. Engl.

After briefly examining medical education in the People's Republic of China before 1949, the author discusses the reforms that took place after that date in keeping with new health policies, particularly the combination and reallocation of medical schools in 1952, the unification of medical education programmes in 1954, and the integration of traditional and Western medicine. Medical education was developed on the secondary and barefoot doctor levels. Recommendations for further advancement include the reeducation of unqualified college graduates, the adoption of an academic degree system, raising paramedical education to the college level, and continuing education for barefoot doctors. (DP-E)

09820 **Organización Panamericana de la Salud, Washington, D.C.** *Programa de estudios superiores sobre sistemas de salud y administración hospitalaria. (Programme of higher studies in health systems and hospital administration).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(6), Dec 1981, 550-552. Span.

In 1973, the government of São Paulo, Brazil, in cooperation with Clinicas hospital, the São Paulo school of business administration, and the Getúlio Vargas foundation, designed a programme aimed at increasing the number and quality of directors, teachers, researchers, and other professionals involved in the field of hospital and health services administration. The programme includes a course of study leading to a bachelor's degree, specialization and continuing education courses for individuals with various backgrounds, and a medical residency in hospital administration. These activities are briefly discussed and the objectives of the programme outlined in this paper. (HC-L)

09821 **Sheiham, A., Jeboda, S.O.** *Periodontal disease in Nigeria: the problem and possible solutions.* Odontostomatologie Tropicale (Dakar), 4(4), Dec 1981, 211-219. Engl. 22 refs.

Periodontal diseases of great severity are common in all categories of Nigerians. Chronic periodontal disease is best controlled by dental health education integrated with general health education. Dental health educators closely affiliated with their community should be trained to help people clean their teeth better and reduce their consumption of refined sugar. Dental therapists should carry out the routine dental procedures; dentists should plan and evaluate the dental services and perform difficult procedures. The planning of services for the control of periodontal diseases should conform to the principles laid down by WHO. Statistical data from several epidemiological surveys are included. (Modified journal abstract)

09822 **Smith, R.A.** *Realistic manpower planning for primary health care: practical considerations.* Tropical Doctor (London), 12(1), Oct 1982, 148-154. Engl.

Meeting of the Commonwealth Secretariat on Special Health Problems of Small States, London, UK, 18 Jan 1980.

This article discusses practical planning for implementable health manpower development programmes appropriate to specific health care needs and adaptable to the context of specific developing country health care systems. The drawbacks of present methods for estimating the need and demand for health manpower are discussed and a summary of the problems facing health planners in the developing world is given. Six points to be considered in efforts to strengthen primary care programmes are listed and eight problems are identified. The MEDEX approach to planning such programmes, developed at the University of Hawaii's (USA) School of Medicine, is described. (DP-E)

09823 **Wankiri, V.B.** *Healthy minds — healthy bodies.* World Health (Geneva), Dec 1982, 10-13. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

To be complete, a primary health care system must include psychiatric services; further, such services will be effective only within such a system. The elements of primary health care contain important implications for mental health and for psychiatric care as a whole. Such an approach to the problem requires a shift in emphasis in training mental health workers; instead of training specialists, health authorities must broaden the training of multipurpose workers. Efforts in various African countries to change the approach to mental health care and to retrain workers are described. (DP-E)

II.2 Organization and Administration

See also: 09877, 10046, 10052, 10153.

09824 **Appropriate Health Resources and Technologies Action Group Ltd., London.** *Assisting dental education and dental public health in developing countries: a symposium. 2 ed. rev.* London, Appropriate Health Resources and Technologies Action Group, 1984. 77p. Engl.

Symposium on Assisting Dental Education and Dental Public Health in Developing Countries, 1980.

A list of participants and the texts of the papers and closing remarks presented at the symposium are included in this report. Papers under the heading of oral health aspects of development problems examined patterns of oral disease in developed and developing countries and the integration of primary oral health care with other primary health activities. Case studies on means of identifying appropriate technologies were presented from Ethiopia, Sierra Leone, Mozambique, and Sri Lanka. Development aid and the international exchange of students and staff were the issues studied in the section on funding for educational development programmes. Four papers related to training are grouped under the subject of organized dentistry's capability to respond at the level of primary health care. (RMB)

09825 **Bianco, N.E.** *Clinical immunology as a new specialty in public health: a model for developing countries.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(1), 1982, 65-70. Engl. 12 refs.

Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana*, 93(2), 1982.

From 1975-1980, the Venezuelan government established a National Clinical Immunology Centre and six regional clinical immunology units. The facilities and functions of the centre and its units, personnel training, and national programme results from 1975-1980 are described. These results suggest that this effort might be used as a model for establishing the practice of clinical immunology in other developing countries. (Modified journal abstract)

09826 **Bland, J.** *Pressure group for Africa.* World Health (Geneva), Oct 1982, 8-11. Engl.

In 1977 WHO began, at the request of Botswana, Rwanda, Swaziland, Tanzania, and Zambia, the Special Programme of Technical Cooperation in Mental Health in order to formulate new strategies for coping with the psychosocial pressures facing many developing country poulations undergoing rapid social change. Some of the progress made in this area is briefly described, with case histories from Zambia, Botswana, and Tanzania. (DP-E)

09827 **Bazova, T.S.** *Skoraja medicinskaja pomosc detskomu naseleniju v gorodah raznogo tipa. [Medical first aid for the pediatric population in different types of cities].* Sovetskoe Zdravookhranenie (Moscow), 9, 1981, 35-40. Russ.

Problems concerning the organization of emergency medical aid to children in the USSR are discussed. The author analyzes the frequency of children's application for such aid in regional and district centres, the influence of the city or town size on this figure, the age distribution of the children seeking aid and brought to hospital by ambulance, the reasons why aid is sought, and variations in the number of children needing the urgent aid. All these data are of great practical importance for institutions rendering emergency medical care to children. Statistical data are included. (Modified journal abstract)

09828 **Carreon, G.G.** *Role of the hospital in primary health care.* World Health Forum (Geneva), 3(2), 1982, 152-155. Engl.

In order to function properly within systems of primary care, hospitals must lose their monolithic image as sophisticated treatment centres and take on the task of organizing health care for entire communities. Examples are given of a Philippine hospital linked to community centres by a two-way patient referral system. Four general areas in which hospitals can participate in primary care are discussed: provision of direct patient services, education and training, research and development, and improved management. (DP-E)

09829 **Chinese Academy of Medical Sciences, Institute of Pediatrics, Collaborative Investigation Team of Rural Child Health Care, Beijing.** *Rural preschool child health care: organization, content and methods.* Chinese Medical Journal (Beijing), 95(8), Aug 1982, 551-556. Engl.

In 1977, the People's Republic of China started a research programme to extend child health services to 77 501 children in 18 communes and 138 production brigades in 19 provinces. A three-level network was developed in regional pilot areas and priority given to only children as a means of reinforcing national family planning policies. In addition to special courses in the medical curriculum, further training was given to barefoot doctors and rural health workers. As a result of these services, neonatal mortality dropped from 15.3%-11.3%, infant mortality fell from 24.0%-18.2%, and rickets and malnutrition were reduced by 50%. (DP-E)

09830 **Deodhar, N.S.** *Primary health care in India.* Journal of Public Health Policy (Burlington, Vt.), 3(1), Mar 1981, 76-99. Engl. 20 refs.

After briefly describing traditional medical practices in India, the author examines Western influences and assesses the health situation from 1947-1981 in terms of infrastructure and special health programmes, with emphasis on the multipurpose approach in health and family welfare. The major health problems are considered and a number of alternative health care models outlined, particularly the health guides scheme. Government primary care policies are stressing three programmes: integrated overall development, including family planning, improvements in nutrition, environment, and health education; and the provision of health services for all. (DP-E)

09831 **East African Management Institute, Arusha, Tanzania.** *Strategies and programmes for the development of an integrated management and administration for the delivery of health services in east, central, and southern Africa.* Arusha, Tanzania, East African Management Institute, 1978. 48p. Engl.

The activities and objectives of the East African Management Institute are described in part 1 of this document, which also contains an outline of proposed teaching materials for a course on the integrated management and administration of health care delivery in eastern, central, and southern Africa. The curriculum of a course in health care administration and management is presented in part 3, while part 4 comprises the report of a workshop on the management and administration of health services for policy makers in ministries of health. The budgets for the teaching materials, course, and workshop are examined in part 5. (DP-E)

09832 **Feldstein, B., Weiss, R.** *Cambodian disaster relief: refugee camp medical care.* American Journal of Public Health (Washington, D.C.), 72(6), Jun 1982, 589-594. Engl. 13 refs.

This paper reviews the conditions, management, and outcome of 924 consecutive admissions to a pediatric ward during the authors' 3-month experience as refugee pediatricians at Khao-I-Dang Holding Centre for Kampucheans in Thailand. The discussion features a number of problems that could have been avoided had information on the handling of similar disasters been available to or followed by the sponsoring agencies, particularly in the areas of hospital administration, laboratory facilities, the briefing of personnel on the prevailing epidemiological situation, treatment protocols, and provision of supplies. A plea for better communication, professionalism, and leadership in the area of disaster relief is made. (HC-L)

09833 **Gillikin, P., Price, L., Lee, S., Sprinkle, M.D., Leist, J.C.** *Self-supporting library service in a rural region: a new look at hospital consortia.* Bulletin of the Medical Library Association (Los Angeles, Cal.), 70(2), Apr 1982, 216-221. Engl. 9 refs.

To meet the informational needs of health care practitioners and trainees in a four-county rural area of northwestern North Carolina (USA), the 11-member UNIFOUR Consortium was founded as an experimental project from 1978-1980. The unique features of this library service are discussed and some of its activities briefly described. At the end of the experimental period, member institutions voted unanimously to continue the programme and assumed their share of the costs. Some statistical data are included. (Modified journal abstract)

09834 **Hinman, A.R., Parker, R.L., Gu, X.Q., Gu, X.Y., Ye, X.F.** *Health services in Shanghai county.* American Journal of Public Health (Washington, D.C.), 72(9), Sep 1982, Suppl., 1-95. Engl.
Workshop on Health Services in Shanghai County, Shanghai, China PR, 6-10 Jul 1981.

This special supplement contains the texts of 26 papers, 23 of which were presented at the workshop, that describe virtually all aspects of the provision of health services in Shanghai county, the People's Republic of China, and document the striking progress made during the past 32 years. Topics covered include vital statistics, family planning, pregnancy and childbirth, maternal child health, student anthropometry, immunization, morbidity, tuberculosis and schistosomiasis control, water supply and waste disposal, occupational health, barefoot doctors, and financing. Some papers also contain background information. (DP-E)

09835 **International Reference Centre for Community Water Supply and Sanitation, The Hague.** *International Reference Centre for Community Water Supply and Sanitation annual report 1982.* The Hague, International Reference Centre for Community Water Supply and Sanitation, 1983. 35p. Engl.

This annual report describes the 1982 activities of the International Reference Centre for Community Water Supply and Sanitation (IRC), a WHO collaborating centre, in the areas of information, technology, manpower development and training, community education and participation, and programme planning and evaluation. The IRC's organization and the programme plan for 1983 are also outlined. Annexes contain lists of publications and staff, members of the governing board, and a project/country matrix. (DP-E)

09836 **Klaus, V., Dechant, W.** *Über unsere ophthalmologische Ttigkeit in Kenia; ein Zweijahresbericht. (Report of two years of ophthalmological work in Kenya).* Klinische Monatsblätter für Augenheilkunde (Stuttgart, Germany FR), 180(2), Feb 1932, 180-183. German.
Tagung der Vereinigung Bayerischer Augenärzte, Munich, Germany FR, 16-17 May 1980.

In reporting on their 2-year experience as lecturers in ophthalmology at the University of Nairobi, the authors discuss the socioeconomic background of Kenya's public

health service, the eye clinic facilities at Kenyatta National Hospital, and the 3-year training in ophthalmology provided by the University. At present there are 45 clinical officers trained in ophthalmology in addition to the country's 34 ophthalmologists, 19 of whom are non-Kenyans (1:450 000 population). Of the 529 operations performed during their stay, 268 involved cataracts and 79 perforated lesions. Problems included inadequate medical supplies, insufficient teaching time and material, and lack of sufficient donors for corneal transplant. A recent survey indicated that cataracts account for 41.8% and trachoma 12.6% of Kenya's estimated 200 000 cases of blindness (1.7% of the population), the majority of these being preventable. (EB)

09837 **Maitchouk, I.F.** *Two WHO targets: trachoma and cataract.* World Health (Geneva), Jan 1983, 18-21. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Various stratagems of the WHO Programme for the Prevention of Blindness, begun in 1978, for controlling trachoma and cataracts — which, with onchocerciasis and xerophthalmia, form the programme's main targets — are briefly described. It is expected that the incidence of avoidable blindness in developing countries can be reduced by 50% over the next 10 years. (DP-E)

09838 **Messe, N.** *Vacances en Chine. (Vacation in China).* Infirmière Française (Paris), 230, Dec 1981, 23-24. Fren.

The impressions of a 1980 visit to the People's Republic of China by a public health nurse from France are presented in this essay. The country's achievements of the last 30 years in the areas of disease control, health education, family planning, maternal child care, and nurseries are described. With the use of traditional plants, acupuncture, and barefoot doctors, the Chinese have developed a low-cost and effective health care system. In Chinese society, which stresses preventive medicine, the individual is responsible for his own well-being and the condition of his environment. (EB)

09839 **Munir, M.** *Health for all: the urgent need of health by the people concept.* Paediatrica Indonesiana (Djakarta), 21(7/8), Jul-Aug 1981, 175-180. Engl.

The primary care concept is reviewed with special reference to Indonesia. After summarizing national health problems, the author stresses the importance of involving the people in the organization of local health services. Inappropriate personnel are seen as one of the major obstacles to equitable health services delivery and the roll of the university in improving the quality of life is emphasized. (DP-E)

09840 **Nlaba-Nsoas, Malonga, M., Baer, F.** *Projet USAID no. 660-0086, SANRU — 86; soins de santé primaires en milieu rural; rapport d'activités janvier-juin 1982. (US AID project no. 660-0086, SANRU — 86; primary health care in a rural setting; activities report for January-June 1982).* Kinshasa-Gombé, Bureau Médical de l'E.C.Z., 1982. 66p. Fren.

Established in August 1981 by the governments of the USA and Zaire, Santé Rurale 86 is a 3-phase project extended over a 6-year period (1981-1986) that aims to identify and assist 50 hospitals in rural areas of Zaire to establish a decentralized system of health care and to organize supply systems for the prevention and treatment of the six most prevalent diseases. This activities report for January-June 1982 contains 17 tables and covers the following areas: planning of zones for rural care, training health manpower, provision of primary health care services, medical supplies on order, financial aspects, and problem areas. (EB)

09841 **Nsekela, A.J., Nhonoli, A.M.** *Development of health services and society in mainland Tanzania (a historical overview — Tumetoka Mbali).* Nairobi, East African Literature Bureau, 1976. 124p. Engl.

The history of Western-style health services in Tanzania is traced through the 1960s and the two Five Year Development Plans of 1964-1969 and 1969-1974. The development of university medical education in East Africa is also summarized. A number of proposals are put forward in the areas of decentralization and manpower development and training. (RMB)

09842 **Organización Panamericana de la Salud, Washington, D.C.** *Control sanitario de los alimentos. (Sanitary control of foods).* Washington, D.C., Organización Panamericana de la Salud, Publicación Científica, No. 421, 1982. 57p. Span. Refs.

Veinteoctava Reunión del Consejo Directivo de la Organización Panamericana de la Salud, Washington, D.C., 1981.

Also published in English as Sanitary Control of Foods.

In addition to the meeting recommendations and final report, this publication contains the texts of two papers on the sanitary control of foods. The 1st, by A.B. Morrison, suggests how control policies could be implemented in Latin America by means of legislation, ministerial decree, strengthening inspection and laboratory services, quality control operations, and training. The 2nd examines problems in food control and proposes a number of general solutions. Both papers contain statistical data. (RMB)

09843 **Ortiz, E.L.** *Motivating the community.* World Health (Geneva), Jul 1982, 15-17. Engl.

In 1977, the Philippines Nurses Association (PNA) undertook a community-based health project in a financially-depressed area (population 6 870) with the aim of helping community members become self-reliant and self-directed in solving community health needs and problems. The nurses were involved in training and supervising *barangay* health workers (BHWs) and arranging group and individual health teaching sessions.

While several successful plans, e.g. environmental sanitation improvements, have been carried out, the project does experience a number of problems that are the direct result of deeply ingrained forces that work against the development of self-reliance, e.g. the economic and political order of the country, authoritarian leadership in the family, etc. The PNA is gradually phasing itself out of the project, leaving the BHWs to continue. (EB)

09844 **Orubuloye, I.O., Oyeneye, O.Y.** *Primary health care in developing countries: the case of Nigeria, Sri Lanka and Tanzania.* Social Science and Medicine (Aberdeen, UK), 16(6), 1982, 675-686. Engl. 20 refs.

Three national health programmes — the Basic Health Services Scheme in Nigeria, Country Health Programming in Sri Lanka, and the Primary Health Care Programme in Tanzania — that have been designed to meet the WHO goal of health for all by the year 2000 are examined with respect to the following: governing policy, administration, new approaches to implementation, and achievements and constraints as observed to date. The discussion sums up the differences and similarities of the programmes — with particular emphasis on ideological basis and political commitment — and estimates their chances of success. (HC-L)

09845 **Peretz, S.M.** *Pharmaceuticals in the Third World.* Tropical Doctor (London), 13(1), Jan 1983, 3-5. Engl.

It is estimated that only 20% of the 1980 world pharmaceutical sales of US$80 billion went to the 117 UN-designated developing countries. This grave imbalance of the availability of drugs prompted the redefinition of WHO's Action Programme for Essential Drugs. The agreements of several international pharmaceutical companies to provide the Third World with reasonably-priced essential drugs and vaccines, as well as expertise on logistics, distribution, and procurement matters, are outlined. The implications of Bangladesh's present Drug Control Ordinance are discussed. (EB)

09846 **Pettiss, S.T.** *Eyes of the innocent.* World Health (Geneva), Jan 1983, 11-13. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Xerophthalmia, the leading cause of preventable blindness in children, results from a dietary deficiency of vitamin A or an inability to absorb adequate quantities of it due to illness. The 1st symptoms are usually night blindness and Bitot's spots. In addition to campaigns to distribute massive doses of vitamin A (in India, Bangladesh, the Philippines, and Haiti), control measures have included rehabilitation centres (India), food fortification (Philippines and Indonesia), and vitamin A supplements distributed by midwives (Philippines and Indonesia). (DP-E)

09847 **Schaefer, M.** *Intersectoral coordination and health in environmental management; an examination of national experience.* Geneva, WHO, WHO Public Health Papers, No. 74, 1981. 122p. Engl.
Also published in French, Russian, and Spanish.

Using the experience of 21 countries, this WHO report aims to improve the delivery of environmental health services, which are usually the responsibility of more than one government department or agency, by emphasizing the importance of coordinating the activities of all of those responsible. After a description of the study methodology and the presentation of the data collected, the factors influencing intersectoral coordination are examined in some detail. Conclusions and recommendations are set forth in the last section. Annexes contain country statements and an analysis of explanatory variables. (DP-E)

09848 **Simmons, W.K.** *Nutritional anaemia in Jamaica; part II: programmes for its prevention and control.* Cajanus (Kingston, Jamaica), 14(1), 1981, 20-30. Engl. 27 refs.
Originally published in West Indian Medical Journal, 29(1), 1980, 15-21; see also entry 9756 (volume 14) for part I.

Nutritional anaemia has been shown to be a public health problem in Jamaica and the government of Jamaica has already implemented programmes to control nutritional anaemia in the country. These programmes include fortification of wheat products with iron, distribution of iron and/or iron and folic acid at antenatal child welfare clinics, nutrition education, administration of antihelminths, and environmental sanitation. (DP-E)

09849 **Stembera, Z.** *Development of maternal and child health care in Czechoslovakia.* World Health Forum (Geneva), 2(4), 1981, 516-520. Engl.

By increasing medical resources and by applying the "risk approach" to care of both mothers and newborns, Czechoslovakia has been able to achieve considerable improvements in maternal and child health care (MCH) over the past 30 years. By 1978, maternal mortality:100 000 deliveries had fallen from 137-13 and perinatal mortality:1 000 live births from 51-18.5, while the number of prenatal clinics increased from 434 in 1948 to 1 840 in 1978 and specialized obstetricians from 326-2 407. Nationalization of the health services and free MCH care in the 1950s made it possible to initiate interventions on a country-wide scale. In the 1960s and 1970s intensified studies of high risk factors were carried out. Future activities include analysis of all biological, social, pre- and postnatal risk factors, and unified pediatric and psychoneurological monitoring of infants. (EB)

09850 **Suwanwela, C., Poshyachinda, V., Tasanapradit, P., Dharmkrong-At, A.** *Primary health care in the hill tribe villages.* Bangkok, Chulalongkorn University, Institute of Health Research, 1978. 10p. Engl.
WHO Workshop on Prevention and Treatment of Drug Dependence, Alexandria, Egypt, 16-21 Oct 1978.

As part of a comprehensive community development programme, operational research in providing primary health care was undertaken in hill tribe villages in the opium-cultivating district of northern Thailand. The programme aimed to prevent and treat drug addiction and to provide a more acceptable and fruitful way of living for those engaged in poppy cultivation. A curriculum and training method were devised and tested for the training of village health volunteers to enable them to provide comprehensive care in this remote and culturally-peculiar setting. The areas of population control, hygiene, sanitation, and nutrition were identified as crucial to this effort. (Modified journal abstract)

09851 **USA, Department of State, Agency for International Development.** *AID project no. 660-0086, basic rural health, project grant agreement.* Kinshasa-Gombé, Bureau Médical de l'E.C.Z., 1981. 17p. Engl.

Appended to the text of the related agreement between US AID and the government of Zaire is a description of a project intended to improve the health status of that country's rural population by increasing the proportion of people who have access to basic rural health services. Its main objectives were to transform dispensaries into full service health centres, retrain employees and identify and train volunteers, and establish a formal mechanism for sharing the experiences of participating hospitals. The project budget is included. (DP-E)

09852 **Vila González, E.** *Participación popular y actividades de salud. (Popular participation and health activities).* Revista Cubana de Administración de Salud (Havana), 8(2), Apr-Jun 1981, 168-179. Span. 27 refs.

The role of community participation in health is analyzed with particular emphasis on the Cuban political context. The activities of organizations such as the *Comités de Defensa de la Revolución* (Committees in Defence of the Revolution), *Central de Trabajadores de Cuba* (Cuban Workers' Union), *Federación de Mujeres Cubanas* (Federation of Cuban Women), etc., are described. (RMB)

09853 **Walker, G.** *Primary health care activities: what are they?* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 194-196. Engl. 13 refs.

The activities associated with primary health care can be considered in three main areas: coordination and collaboration with other sectors, the involvement of local communities in improving their own health status, and support from the formal (or government) health sector. Each of these areas is briefly examined. A list of the eight minimum components of primary care is also given. (DP-E)

09854 **Walt, G., Vaughan, P.** *Primary health care approach: how did it evolve?* Tropical Doctor (London), 12(1), Oct 1982, 145-147. Engl. Refs.

This article briefly traces the development of primary health care, which evolved slowly over the years from different experiences in different countries beginning as early as 1946. The concept assumed its current form at the WHO-sponsored Alma-Ata conference in 1978. (DP-E)

09855 **WHO, Copenhagen.** *Changing patterns in mental health care; report on a WHO Working Group.* Copenhagen, WHO, EURO Reports and Studies, No. 25, Dec 1978. 50p. Engl. 12 refs.
WHO Working Group on Changing Patterns in Mental Health Care, Cologne, Germany FR, 27 Nov-1 Dec 1978.

This is the report of a WHO working group that met to examine and stimulate new developments and changes in the patterns of care for the mentally disordered. Emerging trends in mental health care are briefly considered and planned innovations (as exemplified by various European models) are discussed. Changing patterns of care for subgroups and special problems are also considered. Finally, the group presents its conclusions and recommendations. A list of participants is also included. (DP-E)

09856 **WHO, Geneva.** *Management approach to health systems development.* World Health Forum (Geneva), 3(1), 1982, 64-67. Engl.

Modern management techniques are proving increasingly useful in the administration and delivery of health services in developing countries. This article examines management in health system development and the proper functioning of the management process. Four steps for strengthening the managerial process and four priorities for health managers are presented. Several strategies for improving existing management systems are suggested. (DP-E)

09857 **Widodo, M.H.** *Management of village community health development — a systems approach.* Surabaya, Indonesia, Ministry of Health, 1977. 1v.(various pagings). Engl. 20 refs.

Using numerous diagrams, flowcharts, and point-form descriptions, this paper defines the following in the context of managing village community health development: systems approach, systems analysis, management, administration, supervision, inputs to health, health care decision-making, policy-reviewing, developing a health technology, and deficencies and obstacles to target achievements. (EB)

II.3 Planning

See also: 10012, 10076, 10096, 10135, 10168, 10277.

09858 **Acuña, H.R.** *Plan de acción ante el sistema interamericano. (Plan of action before the inter-American system).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 93(2), Aug 1982, 95-101. Span.
Asamblea General de la Organización de los Estados Americanos, Santa Lucía, 2-11 Dec 1981.

Although a certain amount of progress has been made

in solving the health and economic problems of Latin America, poverty and infant mortality are among the critical issues that still need to be addressed. This article presents a PAHO-endorsed plan of action for the individual nations (rather than regions) comprising the Organization of American States (OAS). Its major objectives include the reorganization and redistribution of health services based on appropriate technology and community participation, the creation and implementation of integrated development plans, and the strengthening of regional and inter-regional cooperation in support of national programmes. The repercussions of this plan on national policies and the potential contributions of the OAS are briefly discussed. (RMB)

09859 **Aidoo, T.A.** *Rural health under colonialism and neocolonialism: a survey of the Ghanaian experience.* International Journal of Health Services (Farmingdale, N.Y.), 12(4), 1982, 637-657. Engl. 60 refs.

This paper considers the impact of the colonial capitalist mode of production on rural health and health care in Ghana, as well as the mechanisms underlying the post-colonial entrenchment of the colonial legacy. The implications of the reformist approach to the problems of health are examined and the possibility of a structural transformationist solution, which must start from the elimination of imperialist control, is assessed. It is concluded that the Ghanian social formation, given its current constitution and crises, makes structural transformation the only viable method of solving the problems of rural health. (Modified journal abstract)

09860 **Alles, J.** *Role of education in reducing infant mortality; suggestions for project formulation; aids to programming UNICEF assistance to education.* Paris, Unesco, Education and Primary Health Care, No.12, N.S.114, Oct 1982. 19p. Engl.

There is a specific role for education in the reduction of infant mortality, of which the benefits would tend to spill over into many areas of community health. This article looks at some of the many factors that affect infant mortality and suggests both short- and long-term educational interventions, the identification, design and implementation of which would require attention to a number of sociocultural variables. Thus the action taken would depend greatly on the location. The author stresses the need for international cooperation in this venture with a major role for Unesco. (DP-E)

09861 **Bain, H.W.** *Community development: an approach to health care for Indians.* Canadian Medical Association Journal (Ottawa), 126(3), 1 Feb 1982, 223-224. Engl.

After reviewing the health services available to Canadian Indians in the Sioux Lookout Zone (where the *per capita* expenditure for health care compares favourably to the Canadian average), the author concludes that the poor health of the Indians there cannot be attributed to the quality of services. He suggests instead that their excess morbidity and mortality are aggravated by a lack of community services (particularly for children aged less than 15 years, who comprise half of the population), poor living conditions and public health measures, and a lack of meaningful input from the Indians themselves. Some recent programmes established to address some of these problems are briefly examined. (DP-E)

09862 **Bhatnagar, S.C.** *Design of a drug supply system for rural health care in India.* World Health Forum (Geneva), 3(2), 1982, 200-203. Engl.

India's primary health care centres, which due to political constraints all operate on the same annual budget regardless of level of activity, are expected to provide treatment for a variety of common ailments. Four arguments are presented in favour of a centralized drug distribution system and the issue of standard pack versus indents is examined; the procedure for designing a standard pack is also outlined. The case history of drug distribution in Uttar Pradesh is used as an example. (DP-E)

09863 **Blom, D.H.** *Objective indicators of health in western Zambia.* Social Science and Medicine (Aberdeen, UK), 15B(3), 1981, 395-398. Engl.

This paper gives a short introduction to the general topic of health and the appropriateness of health-related indicators. The non-existence of vital statistics in most Third World rural areas is then discussed, with comments on some solutions proposed to generate health indicators from defective data. It is argued that the problem becomes more urgent with the growing demand for primary health care programmes. A new indicator, the Survival Index, which is basically the relation between gravidity number and the number of children alive, is then introduced. This indicator is illustrated with some preliminary data from Zambia. Its possible uses and restrictions are discussed and indications are given for further research needed for development of this indicator or related types. (Modified journal abstract)

09864 **Bugnicourt, J.** *Popular participation in development in Africa.* Assignment Children (Geneva), 59/60, 1982, 57-77. Engl.

In an effort to determine whether or not popular participation can constitute a decisive element in future African development, the author describes some cases of popular participation, e.g. a water supply for a squatter settlement; recording of local history, legends, and traditional medical knowledge; and exchanging agricultural know-how. He then argues that participation constitutes a precondition for African development and examines obstacles to a generalization of popular participation, particularly the pitfalls of government-organized participation, the varying cultural responses to participation, the educational and administrative systems' anti-participatory orientation, the past scorn for traditional knowledge, and the heavy burden of participation responsibilities on the urban and rural poor. The paper concludes with a call for African countries to define the

priorities of population participation and to reinforce the potential of human groups. (EB)

09865 **Burenkov, S.P., Glasunov, I.S.** *USSR: the preventive approach to public health.* World Health Forum (Geneva), 3(1), 1982, 54-57. Engl.

The prevention of non-communicable diseases is currently the most potentially effective measure for the reduction of morbidity, mortality, and incapacity to work among the population of the USSR. The authors propose an experimental programme of preventive medicine as a preliminary to a country-wide programme. This programme would concentrate on integrating preventive activities with existing health services. (Modified journal abstract)

09866 **Castrelle, P., Diop Mar, I.** *Facteurs de la relation santé-développement; démographie et santé. (Factors in the relationship between health and development; demography and health).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 297-306. Fren. 18 refs.

See also entries 9892, 9920, and 9929.

This paper examines the health implications of a number of demographic features: migration, urbanization, age structure, fertility, and mortality structure. Examples, mostly from Senegal, of the positive or negative health effects that are likely to be associated with each are given and it is concluded that demography is an invaluable tool for orienting health policy. (HC-L)

09867 **Chossudovsky, M.** *Underdevelopment and the political economy of malnutrition and ill health.* International Journal of Health Services (Farmingdale, N.Y.), 13(1), 1983, 69-87. Engl.

Using Marxist theory, this article analyzes the relationship between capital accumulation, the distribution of income, and patterns of malnutrition and ill health. It is shown that patterns of malnutrition and ill health are socially differentiated and the core disease pattern in Third World social formations is discussed in relation to the material and social conditions of life that generate ill health and underlie particular patterns of peripheral capital accumulation. The study focuses on empirical procedures for analyzing the relationship between levels of money income and levels of calorie and protein intake. An appendix outlines a methodology for estimating undernourishment in urban areas from household budget surveys. (Modified journal abstract)

09868 **Coale, A.J.** *Fertility, mortality and age distributions: introduction.* Jakarta, University of Indonesia, 1972. 43p. Engl.

This book presents an analysis of the relation of levels, age-patterns, and time patterns of fertility and mortality to the growth and age composition of populations. It explains how age structures are formed and vital rates determined by considering the age distributions produced (a) by schedules of fertility and mortality that do not change with the passage of time, (b) by changing fertility when mortality is fixed, and (c) by changing mortality when fertility is fixed. (EB)

09869 **de Ville de Goyet, C.** *Communicable diseases and epidemiological surveillance in natural disasters.* International Medicine (London), 1(4), 1981, 2-4. Engl.

Disasters tend to facilitate the transmission of infectious diseases by causing a deterioration in the standards of sanitation, increased promiscuity in refugee camps, and the disruption of disease control programmes. Six activities essential to a post-disaster programme of epidemiological surveillance are described for use in countries with or without a previously established surveillance system. Disease prevention and control measures should be concentrated in the areas of sanitation and medical treatment, although vaccination campaigns are not recommended for a number of reasons. (DP-Ξ)

09870 **Ehrlich, S.P., Litvak, J.** *Envejecimiento y los países en desarrollo de la región de las Américas. (Aging and the developing nations of the Americas).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(6), Dec 1981, 512-519. Span.

Life expectancy at birth is increasing in Latin America and by the year 2000 a projected 4.6% of the population or 27 million individuals will be aged over 65 years. Moreover, the number of persons aged over 45 years — the point at which the risk of chronic disease starts to rise — will also have increased to 17.3% of the population or 103.8 million individuals. With this prospect in mind, a number of governments in the region have already recognized the elderly as one of the priority groups to be considered in their programmes for health for all by the year 2000. This paper presents seven tables of data on aging in Latin America and the Caribbean and outlines the conferences that have been or are to be convened on the subject at the regional and global levels. (HC-L)

09871 **Fillastre, C.** *Comment rendre opérationnel un programme de vaccinations? (How to set up a vaccination programme).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 74(6), Nov-Dec 1981, 759-763. Fren.

Congrès International de Médecine Tropicale de Langue Française, Agadir, Maroc, 6-9 Apr 1981.

In reponse to a WHO request, extended immunization programmes to control diphtheria, tetanus, poliomyelitis, pertussis, measles, and tuberculosis by the year 1990 are being undertaken worldwide. Because economic, epidemiological, and structural problems differ within countries and regions, a variety of programmes must be developed and implemented. This paper suggests a methodology to be used in the assessment of the initial situation, by considering existing epidemiological data, types of vaccinations, vaccine health structures (cold chain), and health staff. Further processes in programme development are establishing priorities and vaccination calendars, training personnel, and cost-benefit evaluation. Supervision of staff and materials, assessment of the

system, and allowances for programme changes are also vital ingredients for a successful disease control programme. (EB)

09872 **Florentino, R.F., Ganchero, N.M.** *Community participation in the process of nutrition planning and intervention.* Progress in Clinical and Biological Research (New York), 77, 1981, 585-593. Engl.

The role of community participation in nutrition planning and programme implementation is examined in the Philippines *barangays* using the example of the Area Development Program. Essential elements of a successful programme include motivating the local residents, determining their health and other needs, holding nutrition planning workshops and training village-level nutrition planners, and creating or strengthening community organizations. Some of the insights gained from the Area Development Program are presented. (DP-E)

09873 **Fry, J.** *New approach to medicine; priorities and principles of health care.* Lancaster, UK, MTP Press, 1978. 154p. Engl.

This book aims to examine some problems and issues of health care common to all health planners and providers facing restrictions in the amount of resources at their disposal and to consider some possible solutions. Separate chapters cover health care and its problems, the content and implications of primary care, self-care and primary care, manpower policies, the nature and natural history of common diseases, cure and care, prescribing, the hospital, community social services, the primary care team, premises and organization, prevention and postponement, education and learning, and future needs. There is an index. (DP-E)

09874 **Gandhi, I.** *People's movement for health and family planning.* Indian Journal of Pediatrics (Calcutta, India), 48(393), Jul-Aug 1981, 389-394. Engl.

India's Prime Minister addresses some of the unresolved health and population issues facing her country, stressing that, with proper education, the people can be encouraged to form their own health and family planning movement. Leprosy and blindness are presented as the next targets for concentrated disease control programmes, although the reduction of the birthrate is considered the most pressing problem. With primary care now viewed as a priority, more attention must be paid to incorporating traditional practitioners into the organized health care system. (DP-E)

09875 **Gish, O.** *Appropriate choice in health technology.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 223-227. Engl.

Issues in appropriate technology are examined with reference to developing countries and the health sector. Four dimensions of appropriateness in health technology are identified and discussed: appropriateness to goal, appropriateness of product, appropriateness of process, and cultural and environmental appropriateness. An alternative method of analyzing the development and uses of appropriate technology is proposed and a list of high priority research areas is given. (DP-E)

09876 **Golladay, F.J.** *Health problems and policies in the developing countries: a background study for world development report, 1980.* Washington, D.C., World Bank, World Bank Staff Working Papers, No. 412, 1980. 53p. Engl.

Intended for political leaders, development technicians, and health bureaucrats, this working paper focuses on the major health policy issues expected to confront national authorities in developing countries over the next 20 years. It addresses problems in the organization and operation of basic health services. The following areas are examined: health conditions and resources in 1980, recent trends in health conditions in developing countries, the politics of improving access to health care, operations issues in improving this access, institutionalization and management of primary health care, and the financing of health care. The discussions include 14 statistical tables. (EB)

09877 **Hackett, C.J.** *McLetchie on mass campaigns.* Tropical Doctor (London), 12(1), Jan 1982, 35-38. Engl.

A medical field officer with many years experience in the practical and administrative aspects of mass campaigns in Africa offers some advice that, although set down 20 years ago, is still relevant today. Topics covered include the importance of optimizing the participation of local governments, being able to deal with outbreaks of *another* endemic disease during the campaign, maintaining good contacts and cooperation with the various departments of the health services, and planning ahead. Above all, the need for appropriate technology is stressed, for "...no matter how highly developed the hospital services are, they make practically no impression on the basic problems of malnutrition and endemo-epidemic diseases...". (HC-L)

09878 **Harrison, P.** *Vicious circle.* World Health (Geneva), Jun 1982, 18-21. Engl.

The plight of a family from a village in Upper Volta is used to illustrate the harsh living conditions and health problems of the inhabitants of many of the least developed countries. In addition to having a low *per capita* income and slow growth, these regions suffer more than their share of natural and man-made disasters; examples are given from Bangladesh. The author suggests that, besides giving these countries priority in the allocation of aid, special programmes be set up to help them break out of the vicious circle of underdevelopment caused by poverty and ill health. (DP-E)

09879 **Henderson, R.H., Campos-Outcalt, D., Dietrick, R.B., Levin, R., Walsh, J.A.** *Selective health care for developing countries.* New England Journal of Medicine (Boston, Mass.), 302(13), Mar 1980, 757-759. Engl.

Walsh and Warren article appeared as entry 6772 (volume 10).

Drs. J.A. Walsh and K.S. Warren apparently launched a controversy with their article "Selective Primary Health Care: an Interim Strategy for Disease Control in Developing Countries". The paper calls for a phased approach to the introduction of primary health care in the developing countries that focuses first on those diseases that are highly prevalent and occasion much morbidity and mortality. A methodology for selecting programme priorities, which may vary from place to place, is included. This paper presents four letters taking issue with the authors' choice of priorities — especially with regard to vaccination — and the authors' rebuttal. (HC-L)

09880 **Hoff, W.** *Overcoming barriers to sanitary improvements: a primary health care project in the Gilbert Islands.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 3(2), 1982-1983, 195-201. Engl.

In his description of the progress of a sanitation programme to provide safe water and sanitary latrines in the Gilbert Islands (Pacific Ocean), the author identifies the difficulties encountered according to three types of barriers: technological (poor design or functioning of sanitation devices), environmental or situational (high costs, transportation difficulties) and human (people's values, beliefs, attitudes, and habits). While technological and environmental problems are largely solvable, overcoming human barriers involves changing ingrained habits and requires the integration of health education and sanitation programmes. The need for support and involvement of the people themselves at all levels of programme implementation is stressed. (EB)

09881 **Hofoss, D., Hjort, P.F.** *Interrelating action and research in formulating health policy.* World Health Forum (Geneva), 3(2), 1982, 209-214. Engl. 19 refs.

Faced with the pessimistic conclusion that health services research has little or no effect, the authors argue that less emphasis should be given to the immediate effects on policy and practice and more to the long-term and often indirect effects on the concepts and methods that shape a health service. They examine the role of research in policy-making, report on the impact of health services research, and present suggestions on both planning and reporting on research activities in the future. (Modified journal abstract)

09882 **Indonesia, Ministry of Health.** *Health third five year development plan (Repelita III).* Jakarta, Ministry of Health, 1978, 54p. Engl.

A brief look at the various aspects of Indonesia's Third Five-Year Development Plan (1979-1984) is provided. The areas examined include: (a) health development trends; (b) main health problems, e.g., physical, biological, social and cultural environment, types of disorders, health services and manpower; (c) policy and steps; and (d) health programmes, e.g., improvement of community health services, hospital services, communicable disease control, nutrition, environmental health, public health information, drug and food control, health education, and research and development. (EB)

09883 **Jafri, S.A.** *Tuberculosis control: an uphill task in Pakistan.* International Journal of Epidemiology (Oxford, UK), 10(4), Dec 1981, 381-382. Engl.

The author analyzes the reasons why Pakistan's present tuberculosis control programme has failed to make much impact on the 1.54 million cases or the 63 708 annual deaths from the disease in that country and suggests five lines of action that should be vigorously pursued in order to improve the programme. These emphasize: health education, which should be integrated into general health services and practiced by all levels of health workers; better use of social welfare officers, voluntary organizations, and school teachers; and social participation. (DP-E)

09884 **Kaprio, L.A.** *Aging: a statement on health policy.* World Health (Geneva), Feb-Mar 1982, 20-21. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Underlying all policies about people is the universal principle that the whole of humanity is devalued when any group of human beings is devalued, for any reason, whether on the grounds of race, sex, or age. This article presents 10 additional principles intended as a framework for the formulation of policies and programmes on aging within overall national plans. These cover such topics as sharing the benefits of societal development, the individuality of aging persons, non-dependence, choice, home care, accessibility of service, mobility, productivity, etc. (DP-E)

09885 **Kessler, A., Standley, C.C.** *Human reproduction and family planning research strategies in developing countries.* Jakarta, Badan Koordinasi Keluarga Berencana Nasional Pusat, 1979. 7p. Engl.

It appears that in developing countries little effort has gone into formulating appropriate national policies for research into human reproduction and family planning. This is partly because opportunities for local clinical investigations are ignored or research funds are monopolized by small groups of scientists. This paper looks at four questions that require consideration when planning research administration: (1) should research be done? (2) how should priorities be determined? (3) is research on priority problems feasible? (4) what administrative structure is necessary? (EB)

09886 **Leisinger, K.M.** *Health policy for least developed countries.* Basel, Social Strategies Publishers Co-operative Society, Social Strategies: Monographs on Sociology and Social Policy, Vol. 16, 1984. 441p. Engl.

The author examines and evaluates a number of health policy questions of particular relevance to developing

countries. After defining the concepts of health and development within the context of the least-developed countries, he analyzes their health conditions in terms of health, social and economic, and health policy indicators (specifically political commitment and the provision of health care). Four direct health and nutrition interventions in Guatemala, India (Narangwal), Ethiopia, and Nigeria (Imesi) are assessed with regard to effectiveness and results. A cost-benefit analysis of population growth is followed by recommendations for formulating both short- and long-term health policies for least-developed countries based on such principles as selective intervention, satisfaction of basic needs, community participation, and fertility decline. There is a long list of references with an author index. Statistical data are included. (RMB)

09887 **Lunven, P., Sabry, Z.I.** *Nutrition and rural development.* Food and Nutrition (Rome), 7(1), 1981, 13-21. Engl.

This paper summarizes the conceptual and methodological work carried out by a team of FAO staff and consultants in a continuing effort to introduce nutritional considerations into the planning and execution of agricultural programmes and projects. Guidelines were prepared on the basis of experience acquired in various case studies and are currently being applied in field projects in Peru, Haiti, Kenya, Zambia, Sri Lanka, and the Philippines. (Modified journal abstract)

09888 **Mercado, R.D.** *Trends in health services development in countries of the Western Pacific region.* Phillipines Journal of Nursing (Manila), 50(4), Oct-Dec 1980, 127-130. Engl.
Nurses' Week Celebration of the Philippine Nurses Association, Quezon City, Philippines, 28 Oct 1980.

After a description of the socioeconomic trends and health problems of WHO's Western Pacific Region, some problems related to health care in this area are briefly discussed. These include policy, financial constraints, managerial constraints, technology, and manpower. WHO has undertaken three major policy initiatives to resolve these problems: health for all by the year 2000, the primary care approach, and the integration of health into overall national development programmes. To support these policies, regional leaders must strive to strengthen coordination among the different components of the health care sector, reorient and strengthen the health care delivery system, improve the human resources development programme, and introduce administrative and legislative reforms. (DP-E)

09889 **Mills, A.** *Planning for primary health care.* Tropical Doctor (London), 13(1), Jan 1983, 18-20. Engl. 8 refs.

The author looks at the individual steps necessary in the effective planning, at the national and local levels, of primary health care and illustrates the need of structures to undertake and manage such planning, which involves decision-making, coordination, community participation, and information collection and dissemination. The stages the planning process should follow are: situation, analysis, establishment of priorities and objectives, devising strategies and targets, programming, resource allocation and implementation, and evaluation. In conclusion, the three criteria that should shape all planning activity are effectiveness, equity, and efficiency. (EB)

09890 **Oñate, B.T., Uichanco Oñate, L.** *Food and nutrition in Southeast Asia: issues and policies.* Philippine Journal of Nutrition (Manila), 31(3), Jul-Sep 1978, 122-138. Engl. 16 refs.
Seminar-Workshop on Food and Nutrition Policy, Los Baños, Philippines, 18-19 May 1978.

A number of interrelated issues in food and nutrition in Southeast Asia are examined. In setting policies, account must be taken of the limited supply of resources (funds, personnel, and technology), allocation of resources in terms of the benefits returned, the need for special programmes for the poor and for subsistence farmers, and the need for desirable behaviour on the part of the suppliers and consumers of food. An interdisciplinary approach, based on national traditions and institutions and on a great deal of research, is needed. The preliminary efforts of Indonesia, Malaysia, the Philippines, Singapore, and Thailand to deal with the problems collectively are described. Charts and statistical data are included. (DP-E)

09891 **Pelaez G., M.L.** *Underregistration of infant mortality; a new method for its estimation.* Unesco Courrier (Paris), 32(1), 1982, 1-8. Engl. 30 refs.

Because infant deaths are underregistered in many Latin American countries, a method has been developed that permits the calculation of infant death rates based on mortality statistics for children aged 1-4 years. This method is discussed and explained in chart form. Examples and statistical data are included. (DP-E)

09892 **Pene, P., Lauture, H. de, Monges, P.** *Facteurs de la relations santé-développemnt; facteurs socio-économiques. (Factors in the relationship between health and development; socio-economic factors).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 309-312. Fren.

See also entries 9866, 9920, and 9929 (volume 14).

In a very general manner, this paper summarizes the following with respect to Africa: demographic situation (50%-60% of the population aged less than 20 years, birthrate of 45-55:1 000 population, infant mortality of 75-200:1 000, etc.); available health resources (one physician: 20 000-50 000 population, one hospital bed: 10 000-15 000 population); health expenditure (2 000-3 000 times less per head than in the developed countries); and the social phenomena and economic factors associated with under-development. It then briefly examines the interrelationship between health and development and points out some priority interventions and some potentially dangerous aspects of large scale devel-

opment projects (e.g. the proliferation of schistosomiasis from the building of dams). (HC-L)

09893 **Philippines Journal of Nursing, Manila.** *Primary health care.* Philippines Journal of Nursing (Manila), 50(4), Oct-Dec 1980, 137-144. Engl. Nurses' Week Celebration of the Philippine Nurses Association, Quezon City, Philippines, 28 Oct 1980.

This article summarizes the introductory speech and the subsequent open forum discussion at a Philippine symposium on primary health care. The speech addressed the issues of curative and preventive care, and promotive and rehabilitative care. The points raised during the discussion covered such topics as the role of the nurse in primary care, political and economic involvement, and appropriate technology. The participants cite examples from their own experiences. (DP-E)

09894 **Philippines Journal of Nursing, Manila.** *Health for all Filipinos by 2000.* Philippines Journal of Nursing (Manila), 50(4), Oct-Dec 1980, 135-136. Engl.

Some of the steps being taken in the Philippines to provide health for all of its inhabitants by the year 2000 are briefly described. The functions of the community, the health worker, and support mechanisms for the health workers during this process are outlined. The 1st phase (1980-1985) will concentrate on initiating health development activities in selected communities, the 2nd (1985-1995) on expanding these activities to include 90% of the *barangays*, and the 3rd (1996-2000) on consolidation and maintenance. A chart summarizes in point form what was, what is, and what will be. (DP-E)

09895 **Racelis Hollnsteiner, M.** *Participatory imperative in primary health care.* Assignment Children (Geneva), 59/60, 1982, 35-56. Engl.
Towards an Authentic Development: the Role of Adult Education Conference, Paris, Oct 1982.

Referring to the 1978 Alma-Ata conference on primary health care (PHC) strategies and focusing on one of the many characteristics of PHC, namely people's participation, the author reviews some of the issues that have arisen in the course of PHC programme implementation. The following aspects are considered: the status of community participants, the question of sectoral or integrated activities, the selection and training of community health workers, and the political or non-political dimensions. A number of suggestions are made as to what measures outside supporters can make at the community, medical practitioner, government, and international levels. The paper concludes with a list of 8 PHC guidelines for the future. (EB)

09896 **Sarjaini, J., Muchtaruddin** *Drug preparation in referral hospital.* Bulletin Penelitian Kesehatan (Jakarta), 10(2), 1982, 15-20. Engl.

A 1981 survey of 16 referral hospitals in Indonesia was aimed at collecting data by questionnaire to produce a standard drug list that could be used as a guideline for drug preparation in these hospitals. The production of drugs by hospitals would improve the economic benefit, the utilization of manpower, and other hospital facilities. The results of this survey are discussed with the use of five tables. The annex includes the names of 77 drugs that are suggested for production by referral hospitals. (EB)

09897 **Schiller, P.L., Steckler, A., Dawson, L.** *Insider/outsider dilemmas in the development of an Appalachian self-care health education program.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 3(2), 1982-1983, 153-171. Engl. 9 refs.

This case study examines the process whereby a community based self-care health education programme was developed and implemented in a poor coal-mining region of southern Appalachia (USA). One of the principal dynamics explored is the tension between 'insiders' (people who know the area but may not be well-versed in programme planning, implementation, or evaluation) and 'outsiders' (people who may be professionally prepared for mounting programmes but are hampered in their ability to adjust to or handle the vicissitudes of an unfamiliar social or cultural situation). Suggestions are advanced as to how this tension might be better managed. (Modified journal abstract)

09898 **Senaviratne, G.** *Can statistics lie?* World Health (Geneva), Jun 1982, 9-11. Engl.

Citing the example of statistics on life expectancy, mortality, literacy, health expenditures, and physician:population ratios, the author deplores the false picture these figures present of the health status of the least developed countries. The main reason is because these data, probably inaccurate to begin with, are only available from a few large urban parts of each country, thus ignoring the rural areas where millions of people live and die without ever seeing a doctor or census-taker. He also cautions against confusing the health industry with health itself and comments on World Bank and WHO reports and plans aimed at addressing Third World health Problems. (DP-E)

09899 **Sène, P.M.** *Africa: the Sahel zone.* World Health (Geneva), Jun 1982, 23-27. Engl.

Because the inhabitants of the Sahel countries are the poorest of the African poor, a pattern of rural-urban migration, over-rapid urbanization, the development of shanty towns, and unemployment have emerged as the starving people abandon their traditional agricultural lifestyles. As a result, those left behind in the rural villages depend more on the economic support of their relatives in the cities, whose industries further undermine the agricultural sector by using up scarce capital resources. A variety of programmes such as forestation and desert control that have been adopted by the countries in the Sahel region to prevent the further destruction of agricultural resources, and the resulting malnutrition and ill health, are briefly described. (DP-E)

09900 **Shankarnand, S.B.** *Health perspectives in India.* Indian Journal of Pediatrics (Calcutta, India), 48(394), Sep-Oct 1981, 553-555. Engl.

Strategies for dealing with India's major health problems are briefly outlined. The areas of major concern are felt to be population growth, maternal child health, infectious and parasitic diseases, control of blindness, medical research and education, and the integration of traditional and Western medicine. (DP-E)

09901 **Shuval, H.I., Tilden, R.L., Perry, B.H., Grosse, R.N.** *Effect of investments in water supply and sanitation on health status: threshold-saturation theory.* Bulletin of the World Health Organization (Geneva), 59(2), 1981, 243-248. Engl. 13 refs.

The threshold-saturation theory presented here considers three variables (health status, socioeconomic status, and sanitation level) and attempts to encompass, for the lst time in one general framework, numerous conflicting empirical findings. The two-tiered, S-shaped logistic form of the proposed relationship assumes that, at the lower end of the socioeconomic spectrum, there is a threshold below which investments in community water supplies and/or excreta disposal facilities alone result in little detectable improvement in health status. The same threshold exists at the other end of the spectrum. The model is supported by preliminary attempts to test it, but further study is needed. (Modified journal abstract)

09902 **Smith, R.A.** *Primary health care — rhetoric or reality?* World Health Forum (Geneva), 3(1), 1982, 30-37. Engl. 11 refs.

This article describes a way of approaching primary health care in terms of 10 problems seen in a number of countries, 10 principles that have been found useful in developing action strategies, and relationships between countries and collaborators that could facilitate the development of primary health care. Examples are taken from many developing countries. (DP-E)

09903 **Trowbridge, F.L., Stetler, H.C.** *Nutritional status surveillance in El Salvador.* Bulletin of the World Health Organization (Geneva), 58(2), 1980, 327-332. Engl. 13 refs.

See also entry 9776 (volume 14); also published in French and Spanish.

A method of continuous nutritional surveillance based on routinely collected data to provide nutrition information for evaluation and planning has been developed in El Salvador. Surveillance indicators have been systematically evaluated by comparison with on-going field survey measurements. Data are being tabulated every 6 months to show seasonal and geographical differences in nutritional status. It may be possible in the future to monitor data from outside the health sector (e.g., food prices, agricultural production, and family income) and thereby gain further insights into the situation. A concrete illustration of this system is provided with data relating to preschool children. (Modified journal abstract)

09904 **UNDP, New York.** *UNDP programme advisory note; primary health care, with special reference to human resource development.* New York, UNDP, Bureau for Programme Policy and Evaluation, Technical Advisory Division, Oct 1983. 20p. Engl.

This advisory note was issued for the orientation of UNDP field offices and programme staff on the practical issues and problems involved in designing and implementing primary health care (PHC) schemes. It is intended as a guide to project preparation, monitoring, and appraisal. It looks at the organization and management of PHC systems, presenting some of the major difficulties likely to be encountered, particularly the economic and cultural factors involved. The role of external support and technical cooperation for PHC is discussed. (EB)

09905 **Valverde, V., Rojas, Z., Vinocur, P., Payne, P., Thomson, A.** *Organization of an information system for food and nutrition programmes in Costa Rica.* Food and Nutrition (Rome), 7(1), 1981, 32-40. Engl. 12 refs.

This paper discusses the information needed for multidisciplinary planning aimed at reducing nutritional deprivation in Costa Rica. In recent years, an approach has been developed for organizing data and information so as to define and describe target groups of households. The development of a functional classification, a central activity of the Nutrition Information System (SIN), is described and a preliminary description of the population groups affected by malnutrition presented. The major obstacles of SIN are outlined and the possibilitiies of applying the same system to other countries discussed. Some illustrative statistical data are included. (Modified journal abstract)

09906 **Verma, I.C.** *Census of India, 1981 and implications for health planning.* Indian Journal of Pediatrics (Calcutta, India), 48(393), Jul-Aug 1981, 395-404, Engl.

India's 1981 census collected data on population size and distribution, growth rate, density, sex ratios, and literacy. The implications of the census are analyzed in order to set the record straight, identify problem states, examine the sex ratio and the status of women, assess literacy rates, measure the need for urban planning, and determine population policy. The implications for health care are also discussed. (DP-E)

09907 **Walt, G.** *Commitment to primary health care in Mozambique: a preliminary review.* Rural Africana (East Lansing, Mich.), (8/9), Fall-Winter 1980-1981, 91-98. Engl. 12 refs.

The health policy adopted by Mozambique after 1975 reflected its new political ideology in that health services were to serve the mass of the people, not just the urban elite, and the emphasis was to be put on preventive care. After a short survey of the historical circumstances of Mozambique's independence and the structure of the inherited medical services, an attempt is made to exam-

ine some of the assumed necessary conditions for primary health care and to compare Mozambique's present and past policies, especially in the area of essential drugs. (Modified journal abstract)

09908 Water and Sanitation for Health Project, Arlington, Va. *Evaluation methods for community rural water supply and sanitation projects in developing countries; a synthesis of available information.* Arlington, Va., Water and Sanitation for Health Project, WASH Technical Report, No. 4, 31 Mar 1981. 29p. Engl.

After presenting background information on community-based water supply and sanitation projects in Malawi, this report considers the reasons for evaluating these projects. Evaluation approaches, skills, and requirements are examined, including conceptual requirements, developmental stages, a paradigm for project evaluation, and personnel, skills, and other resources. Evaluation methods feasible for use in Malawi are considered and a number of recommendations concerning the need for evaluation of the country's water system are presented. (DP-E)

09909 Waterston, A.R. *Child health in district and rural hospitals; guidelines for improving the services.* Central African Journal of Medicine (Harare), 28(12), Dec 1982, 298-303. Engl.

As a result of experience gained by 5th-year medical students participating in Zimbabwe's innovative pediatrics programme based in rural hospitals, recommendations are made for improving standards of inpatient care in children's wards (mainly by permitting mothers to remain with sick children), and outpatient care in hospital and peripheral clinics. Specific reference is made to the Road to Health chart, the need for proper diarrhea therapy based on oral rehydration, and nutrition education involving posters, talks, demonstrations, ward diets, and nutrition villages. (DP-E)

09910 WHO, Copenhagen. *Early detection of handicap in children; report on a WHO Working Group.* Copenhagen, WHO, EURO Reports and Studies, No. 30, May 1979. 45p. Engl. 29 refs.
WHO Working Group on the Early Detection of Handicap in Children, Faro, Portugal, 15-18 May 1979.

This WHO report recommends methods for the comprehensive management of programmes in maternal and child health, taking into account health and socioeconomic factors and the consequences of early detection. Separate chapters cover the definition of the problem, early detection programmes, approaches to dealing with the problem, administrative issues, personnel, research, conclusions, and recommendations. A list of participants is contained in the annex. (DP-E)

09911 WHO, Geneva. *National decision-making for primary health care; a study by the UNICEF/WHO Joint Committee on Health Policy.* Geneva, WHO, 1980. 69p. Engl.

The results of a WHO-assisted study (carried out by Mali, Burma, Yemen, Costa Rica, Finland, and Papua New Guinea) to identify the processes involved in developing and implementing the primary health care approach are summarized in this report. Separate chapters cover: decision-making; politics, government, and planning; community involvement; progress in implementing primary care programmes; and decisions on health sector resources. Eight recommendations are presented that may assist other developing countries to develop primary care programmes. (Modified journal abstract)

09912 WHO, Geneva. *Developments of indicators for monitoring progress towards health for all by the year 2000.* Geneva, WHO, 1981. 91p. Engl. Refs.

These guidelines are intended to help WHO members decide which indicators to use, particularly at the national level but also at the regional and global levels, for monitoring progress towards health for all by the year 2000. Four categories of indicators are proposed: health policy indicators, social and economic indicators, indicators of the provision of health care, and indicators of health status, including quality of life. These indicators are examined in terms of selectivity, relevance, and usefulness as tools for monitoring and evaluation. Particular emphasis has been given to the information requirements for the various indicators, the principal sources of data and alternative methods of data collection, and the information analysis involved. (DP-E)

09913 WHO, Geneva. *Global strategy for health for all by the year 2000.* Geneva, WHO, Health for All Series, No. 3, 1981. 90p. Engl.
Also available in Spanish as *Estrategia mundial de salud para todos en el año 2000.*

A direct result of the 1978 Alma-Ata conference, this global strategy reflects the national and regional strategies that have since been formulated by WHO members as seen from a global perspective. Separate sections cover world health and related socioeconomic problems and trends, health policy and related socioeconomic policy, developing health systems, promoting and supporting health system development, generating and mobilizing resources, intercountry cooperation, monitoring and evaluation, and the role of WHO. (DP-E)

09914 WHO, Geneva. *In search of a common goal: TCDC and health development in Africa.* WHO Chronicle (Geneva), 33(5), 1979, 174-176. Engl.
Also published in French, Russian, and Spanish.

The aim of technical cooperation among developing countries (TCDC) is to promote an exchange of appropriate technologies and ideas between countries with similar socioeconomic conditions. A specific TCDC programme for the African region has been evolved in order to 1) create a framework in which such cooperation can be carried out and 2) determine appropriate methods and mechanisms by which it can be fostered and strengthened. This paper briefly discusses the meetings, policies, and activities of the TCDC programme to date

and examines its potential in areas such as information, research, primary health care, and health personnel training. (HC-L)

II.4 Geographical Distribution of Health Services and Workers

See also: 09845.

09915 **Johnson, I.C., Robertson, R.V.** *Role of the medical school in manpower planning.* Journal of Medical Education (Chicago, Ill.), 57(2), Feb 1982, 125-127. Engl.

In 1970, the Southern Illinois University School of Medicine (USA) was established to help meet the health needs of medically underserved areas. To enable the development of academic programmes that would produce the specialists most needed in the region, accurate and reliable information on physician supply was required. This article describes the organization and uses of the Physician Information System, a computerized monitoring system developed by the medical school to obtain information about the distribution and practice characteristics of area physicians. (DP-E)

09916 **Thésarieux, C.** *Migration internationale des cadres du secteur santé. (International migration of health workers).* Développement et Santé (Paris), 39, Jun 1982, 25-28. Fren.

This paper briefly examines the extent, direction, and consequences of the migration of health professionals in the world today. Some measures aimed at preventing the emigration of health personnel include the following: producing health personnel only in quantities that can be properly remunerated and efficiently deployed by the health sector; bringing medical education into line with national needs rather than international standards; not counting on high-level personnel to fill posts in rural areas; limiting by means of scholarships the number of students completing their studies in foreign countries; and raising salaries and improving working conditions at home. Restrictive measures may also be adopted by both importing and exporting countries. Cooperation on the part of both in the search for more equitable distribution of health personnel is called for. (HC-L)

II.5 Financial Aspects

09917 **Acuña, H.R.** *Health priorities in Latin America and the Pan American Health Organization.* Social Science and Medicine (Aberdeen, UK), 15D(4), Nov 1981, 537-539. Engl.

As Latin American countries attempt to expand their health care delivery systems, they face severe economic constraints, rapidly growing and urbanizing populations, widespread social disruption, and environmental degradation. This paper briefly reviews the region's socioeconomic, demographic, social, and physical environment and the status of its health sector; discusses some tools of special significance to Latin America for obtaining health for all by the year 2000; and briefly examines the history of PAHO and its special capability for working toward this end. (HC-L)

09918 **Berman, P.A.** *Selective primary health care: is efficient sufficient?* Social Science and Medicine (Aberdeen, UK), 16(10), 1982, 1054-1059. Engl. 10 refs.

See also entry 6772 (volume 10).

Because of the errors that can result from using economic evaluation methods to assess and develop primary health care strategies, the author proposes a multiple-objective approach in place of the cost-effective approach recommended by Walsh and Warren, whose paper "Selective Primary Health Care: an Interim Strategy for Disease Control in Developing Countries" is analyzed in some detail. The author recommends that all primary care activities be evaluated in terms of effectiveness and equity as well as efficiency. (DP-E)

09919 **Bewes, P.C.** *Surgery with limited resources.* World Health Forum (Geneva), 3(1), 1982, 58-61. Engl.

Because many developing country populations will not accept preventive services without some demonstration of the surgical skill of the health providers to treat more obvious problems, the author (himself a surgeon with considerable experience in Tanzania) maintains that it is possible to deliver low-cost, high quality surgical services in rural regions by cutting costs in three areas. These are manpower, capital outlay, and replacable items such as drugs and suture materials, each of which is examined in detail. He concludes that properly trained and supervised auxiliaries can perform operations such as skin grafting in primitive surroundings with cheap and/or recycled materials. (DP-E)

09920 **Brunet-Jailly, J.** *Facteurs de la relation santé-développement; analyse économique de la relation santé-développement. (Factors in the relationship between health and development; economic analysis of the relationship between health and development).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 313-319. Fren.

See also entries 9866, 9892, and 9929.

An actual demonstration of the value of health interventions in terms of increased economic productivity has yet to be made, but the author claims that it could be, given the proper statistical information. He also argues that accurate statistical data are essential to making an informed choice about the most cost-effective health intervention in a given situation. He cites as an example a study undertaken in three developing countries that showed that the interventions that had the greatest impact on infant mortality were vaccination and environmental health programmes, independent of dispensaries or village health workers. (HC-L)

09921 **Cobas Manrique, J., Ledo Duarte, S.** *Estudio de la relación de la teoría de la planificación de la salud con la economía. (Study of the relation-*

ship between health planning theory and the economy). Revista Cubana de Administración de Salud (Havana), 8(2), Apr-Jun 1982, 236-241. Span.
Segundo Congreso Nacional de Administración de Salud, Cienfuegos, Cuba, 2-4 Oct 1980.
This article examines the need for the scientifically-based planning and organization of public health activities and their close ties with the basic economic laws of socialism. The relationship of health planning to Cuban economic policy, health financing, and health economics is analyzed by evaluating the forms and types of health care and related institutions. The components of a public health planning strategy are considered and compared in theoretical terms to socialistic economic policy. (Modified journal abstract)

09922 **Grosse, R.N., de Vries, J., Tilden, R.L., Dievler, A., Day, S.** *Health development model application in rural Java.* In Tilgium, C., Systems Science in Health Care, Toronto, Pergamon Press, 1981, p.119-127. Engl.
Limited resources and political pressures to improve health in developing countries have created a need for improved planning of health systems. This study describes how a health development model was designed for application in rural Indonesia to assist policy-makers in the allocation of resources among health programmes. The model uses a systems approach to compare alternative programmes of prevention and medical care organization. The use of the model led to the ranking of alternatives on the basis of cost and effectiveness estimates rather than changes in morbidity, mortality, and utilization rates. Hence, research priorities lie in improving the model through further cost analysis and programme-specific effectiveness studies. (Modified journal abstract)

09923 **New Scientist, London.** *Showdown for drug firms in Bangladesh.* New Scientist (London), 96(1331), 11 Nov 1982, 344. Engl.
Government policy in Bangladesh, which has banned the importation of all drugs not on WHO's list of essential drugs and others for which there are locally-produced equivalents, is compared to that of Burundi, which is accepting subsidized bulk shipments of drugs from three Swiss manufacturers and distributing them locally. Thailand, Mozambique, and Greece have also taken steps to limit the numbers and prices of available drugs, although their efforts are being strenuously resisted by the international pharamaceutical companies. WHO has apparently given its support to both approaches. (DP-E)

09924 **Rosenfield, P.L.** *Management of schistosomiasis.* Washington, D.C., Resources for the Future, Research Paper, No. R-16, 1979. 136p. Engl. Refs.
In this study, a method for predicting the prevalence of schistosomiasis in an endemic area is explored and then used to examine schistosomiasis management strategies in the context of a water resources project. A method of analyzing the costs and effectiveness of alternative control measures is presented in order to develop the management approach. Alternative management strategies, which include implementation measures and institutional arrangements, are then compared, using examples from St. Lucia and Ghana. The conclusions for the various analyses are summarized together with future research proposals that may lead to the prevention of adverse health impacts resulting from development projects. (DP-E)

II.6 Cultural Aspects

See also: 10068, 10115.

09925 **Bassher, T.** *Healing power of faith.* World Health (Geneva), Oct 1982, 5-7. Engl.
The possibility of incorporating traditional religious treatment for mental illnesses into modern psychiatric services is briefly examined. Some of these treatments include the sort of mass therapy provided at Lourdes or in the Coptic Church, the rhythmic drumming or prayers typical of some Muslim sects, and the ministrations of religious healers, who are virtually universal. Some examples of cooperation between traditional and Western systems, particularly the psychiatric villages in the Sudan, are described. (DP-E)

09926 **Bassher, T.** *Use of drugs in the Islamic world.* British Journal of Addiction (Harlow, UK), (76), 1981, 233-243. Engl. 31 refs.
This paper describes the development of the early Islamic community and the control of alcoholism within the context of overall sociocultural changes. The Islamic approach and the technique of the step-by-step methods that were applied to attain acceptance of prohibition are discussed. The origin and use of opium, cannabis, khat, and synthetic psychoactive substances in the Islamic world are also reviewed. Finally, the role of Islam in the prevention and treatment of drug abuse is outlined. (Modified journal abstract)

09927 **Batukezanga, Z.** *Guérir le malade et la maladie; l'infirme et son univers en Afrique noire. (Cure the disease and the patient: the disabled and their environment in Africa).* Kinshasa, Zaire, Presses KIKESA, Sep 1981. 111p. Fren.
This monograph reviews traditional Kongo beliefs (Zaire) regarding the origins of congenital and acquired infirmity, traditional attitudes governing the relationship between the disabled and the family and the disabled and society, and traditional versus modern approaches toward disease and the patient. It then calls for cooperation on the part of social workers, physiotherapists, occupational therapists, and other health workers in the management of disability, and for education, not only for the disabled, but also for society at large. The book is clearly and interestingly written and would help health workers and the public alike to better understand the position of the disabled in African society. (HC-L)

09928 **Bibeau, G.** *New legal rules for an old art of healing: the case of Zairian healers' associations.* Social Science and Medicine (Aberdeen, UK), 16(21), 1982, 1843-1849. Engl. 12 refs.

Legitimacy of traditional medicine practice could be recognized by modern legal codes in Africa through simple procedures. Such recognition, however, cannot ignore the cultural or metaphysical element of traditional healing such as witchcraft, spirits, magic, ritual therapy, and divination; indeed, this dimension of traditional healing must be embraced, at least by assumption, by the law. Western-oriented codes of law, such as generally exist in African states, are limited in their ability to integrate African medical concepts. These issues are discussed with special reference to Zaire. (Modified journal abstract)

09929 **Colin, R., Wone, I.** *Facteurs de la relation santé-développement; les facteurs socio-culturels et la stratégie du développement intégré de l'action de santé. (Factors involved in the relation between health and development; sociocultural factors and an integrated health and development strategy).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 323-330. Fren

See also entries 9866, 9892, and 9920.

There are actually two papers presented in this article: the 1st, a lengthy dissertation on traditional African society and world view, in which the traditional perception of health and sickness is contrasted with the European; and the 2nd, a shorter paper in which a more or less successful example of the adoption of modern health services by rural people (the village health workers and village pharmacy programme in Niger) is cited and its acceptance attributed to 1) a training programme that was adapted to the health and social context and 2) the active participation of the villagers in its establishment and maintenance. (HC-L)

09930 **Elmendorf, M.L., Isely, R.B.** *Role of women in water supply and sanitation.* World Health Forum (Geneva), 3(2), 1982, 227-230. Engl.

Because women in developing countries function as the main selectors, carriers, and care-takers of the water consumed by their families, they must be encouraged to participate in all activities related to community water supply and waste disposal. Some attitudes that can influence these activities (e.g., the perception of water as a 'hot' or 'cold' food, cultural taboos against men and women using the same latrine, the belief that children's feces are harmless) are discussed. Four suggestions for educating women as users of water and sanitation facilities are presented and their role as manager of these facilities is also considered. (DP-E)

09931 **Gassita, J.N.** *Utilisation de la pharmacopée traditionelle dans les soins de santé primaires. (Utilization of traditional pharmacopeia in primary health care).* Médecine d'Afrique Noire (Paris), 28(10), Oct 1981, 561-564. Fren.

If the goal of health for all by the year 2000 is to be reached, developing countries in Africa must make use of all resources at their disposition, including traditional pharmacopoeia. Indeed, some governments have already launched scientific research aimed at isolating the active ingredients in medicinal plants and determining their physiological effects. Once their efficacy and safety have been established and indications for their use have been developed, these plants could be cultivated by communities for their own use. A list of common and serious conditions for which specific herbal treatments could be drawn up is included. (HC-L)

09932 **Janzen, J.M.** *Need for a taxonomy of health in the study of African therapeutics.* Social Science and Medicine (Aberdeen, UK), 15B(3), 1981, 185-194. Engl. 31 refs.

Most medical ethnographies in Africa have focused on notions and taxonomies of disease, their causes, and therapies available to treat them. This pathology-oriented perspective misses, or underplays, important though often unlabelled practices and ideas of hygiene, adaptation to the environment, normative health, and the conscious maintenance of health ideals, all of which are increasingly important in planning health programmes based on popular support and rooted in cultural values. The author argues that medical anthropology needs to consider, as a single domain, both disease and health and the study of this expanded domain. In order to more adequately identify and analyze such an expanded domain, he reviews numerous ethnographic works on medicine and health in Africa. (Modified journal abstract)

09933 **Jeffry, R.** *Policies towards indigenous healers in independent India.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1835-1841. Engl. 38 refs.

Policies towards indigenous healers in independent India show considerable continuity with policies followed in the British period, varying according to the sex of the healer. Traditional birth attendants (*dais*) have been offered short periods of training since 1902, whereas until recently male healers (*vaids* and *hakims*, and later homoeopaths) have been treated with official hostility. Current plans include the training of religious and ritual healers in psychiatric services as well as the employment of indigenous healers in new community health schemes. These changes are assessed in the context of a political economy of health services. (Modified journal abstract)

09934 **Kikhela, N., Bibeau, G., Corin, E.** *Africa's two medical systems: options for planners.* World Health Forum (Geneva), 2(1), 1981, 96-99. Engl.

Confronted with the reality of a modern and a traditional medical system, African health policy planners have four options: to outlaw traditional medicine, informally to recognize traditonal medicine, to pass simple legislation to regulate traditional medicine, or, to cooperate gradually with healers with a view to modifying the whole health structure of the country. These options are briefly

discussed and some guiding principles for working toward the favoured one (the last) are outlined. (HC-L)

09935 **Kitzinger, S.** *Stealing a woman's choice.* New Internationalist (Toronto, Ont.), Apr 1982, 14-15. Engl.

A number of common practices that discourage Western women from breast-feeding (thus setting an unfortunate example for mothers in developing contries) are briefly described. These are mainly hospital interventions such as drugs and rooming policies, the distribution of free samples to departing mothers, and the inability of staff to teach about and encourage breast-feeding. (DP-E)

09936 **Mshiu, E.N., Chhabra, S.C.** *Traditional healers and health care delivery in Tanzania.* Tropical Doctor (London), 12(3), Jul 1982, 142-143. Engl. 9 refs.

Statistical data on health manpower in Tanzania are cited to show how the practitioner:population ratio is inadequate now and will be even more so by the end of the century. It is therefore suggested that the modern health sector make an effort to cooperate with the traditional healers who are, in any case, serving some 13 million Tanzanians at present. Under a cooperative scheme, traditional healers could alert the health system of outbreaks of communicable diseases, provide (presumably with suitable training) health education and health promotion, and refer seriously-ill patients to the health centre. In addition, traditional pharmacopoeia could be subject to scientific scrutiny and useful remedies adopted by the modern sector. (HC-L)

09937 **Peltzer, K.** *Traditional medicine and its promotion in the Zimbabwean village Nyabanga, Inyanga district.* Central African Journal of Medicine (Harare), 27(10), Oct 1981, 205-208. Engl.

As part of a study of the role of traditional healing practices in primary care, the types and functions of the 19 traditional practitioners in the village of Nyabanga, Zimbabwe, are analyzed. Their concepts of illness are examined and the possibility of their cooperation with Western health workers pursued in a discussion with the practitioners themselves. (DP-E)

09938 **Ramesh, A., Hyma, B.** *Traditional Indian medical systems as a field of study for medical geographers.* Geographia Medica (Budapest), 11, 1981, 116-140. Engl. 78 refs.

After briefly reviewing the role of traditional medicine in the health care systems of Asia as a whole, the authors examine the traditional medical system of India, with emphasis on Ayurveda and the growth and development of similar practices. The need for geographical investigation and analysis of these systems is stressed and the issues and problems created by such an analysis in an urban context are presented. (DP-E)

09939 **Slikkerveer, L.J.** *Rural health development in Ethiopia; problems of utilization of traditional healers.* Social Science and Medicine (Aberdeen, UK), (16), 1982, 1859-1872. Engl. 92 refs. Symposium on the Utilization of Indigenous Healers in the National Health Delivery Systems, Edinburgh, UK, 12-17 Apr 1981.

In Ethiopia, a pluralistic complex of multiple and simultaneous medical care utilization has constituted the Ethiopian variant of medical pluralism in East Africa, where, through a process of acculturation, Cushitic, Arabic, and Amharic medical traditions co-exist with Western-style medicine. This paper describes existing alternative health care resources in Ethiopia and examines the contribution of medical pluralism to rural health planning within the context of a joint research project carried out by the universities of Addis Ababa and Leiden. Problems in the utilization of traditional healers and the possibilities for incorporating them into a national health care delivery system are discussed. (DP-E)

09940 **Warren, D.M., Bova, G.S., Tregoning, M.A., Kliewer, M.** *Ghanaian national policy toward indigenous healers; the case of the primary health training for indigenous healers (PRHETIH) program.* Social Science and Medicine (Aberdeen, UK), (16), 1982, 1873-1881. Engl. 28 refs.

Ghana's policy towards traditional practitioners is reviewed and their potential and actual utilization in the national health care delivery system is estimated. Strategies for coordinating the primary health training for indigenous healers (PRHETIH) programme, described here, with the ministry of health and different categories of healers (mainly traditional birth attendants, herbalists, and shamans) are examined with emphasis on sociocultural, economic, political, and administrative factors. Recommendations for expanding the programme are presented. (Modified journal abstract)

09941 **Werner, D.** *Health care and politics; a personal statement.* Palo Alto, Cal., Hesperian Foundation, Jun 1979. 7p. Engl.

Two anecdotes from the author's experience as a health worker at Project Piaxtla, Mexico, are recounted to illustrate that poverty and ill health are not the result of scarcity but rather of exploitation and that social justice is more fundamental to health than the provision of health services. In the 1st case, a family falls further and further into debt to a large landowner for grain borrowed each planting season; in the 2nd, a landowner fires an ailing employee and then tries to deprive him of his right to his vegetable patch. In the 2nd case, villagers and health workers organized to prevent the landlord from doing so. It is concluded that social justice depends on the poor and oppressed recognizing their needs, analyzing their situation, forming a strategy, and uniting to work toward social change. Examples of consciousness-raising in the form of three theatre productions are given. (HC-L)

09942 **WHO, Alexandria.** *Traditional practices affecting the health of women and children; female circumcision, childhood marriage, nutritional*

taboos, etc. Alexandria, WHO, WHO/EMRO Technical Publication No. 2, 1981. 170p. Engl.
Seminar on Traditional Practices Affecting the Health of Women and Children, Khartoum, Sudan, 10-15 Feb 1979.

This document contains the report of a seminar intended to establish effective ways of dealing with customs, taboos, and traditions in the areas of nutrition during pregnancy and lactation, female circumcision, and child marriage and early teenage childbirth. After the recommendations, which are given first, separate sections present the discussions and papers concerned with each of the above-mentioned areas; included are the texts of the opening and closing sessions, the agenda, a provisional programme, and lists of participants and basic documents. (DP-E)

09943 **WHO, Geneva.** *Women and breast-feeding.* Geneva, WHO, n.d. 31p. Engl. 9 refs.

This WHO booklet is intended to raise awareness about women's issues related to breast-feeding and to suggest activities for women's organizations who want to promote it. Separate sections cover: factors affecting breast-feeding, such as time and work, family structures, information, and health and health care practices; women's rights; motherhood; social support measures including laws and regulations, family and community support, and primary care; and the role of women and women's organizations. (DP-E)

09944 **Wone, I., Lauture, H. de** *Facteurs socio-culturels de la relation santé-développement. (Socio-cultural factors in the relationship between health and development).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 331-334. Fren.

With reference to Africa, this paper presents some thoughts on the community approach to health services delivery, health education, the dissemination of health information (particularly through the mass media), and the attitude of the health services *vis-à-vis* traditional beliefs and customs. (HC-L)

II.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition and Disease Control Studies

See also: 09806, 09865, 09887, 10056, 10133, 10159, 10347, 10375, 10452, 10484.

09945 **Agarwal, B.L.** *Rheumatic heart disease unabated in developing countries.* Lancet (London), 24 Oct 1981, 910-911. Engl. 15 refs.

Rheumatic fever and rheumatic heart disease are 10 times more prevalent in developing countries than in Western industrialized countries. About 6 million children in India may be afflicted with rheumatic heart disease, while there has been no change in the prevalence of rheumatic heart disease from 1935-1975. In surveys of schoolchildren in the 1960s the incidence ranged from 0.15%-0.31% and as high as 3.96% in cold hilly areas. Rheumatic heart disease formed 32%-50% of childhood cardiac hospital admissions in Allahabad. The decline of rheumatic fever and rheumatic heart disease in the West and in some Asian countries has been associated with economic improvement, which seems to be the best long-term solution. (Modified journal abstract)

09946 **Aguilar, F.J.** *Helmintiasis humanas transmitidas a través del suelo en Guatemala. (Soil-transmitted human helminthiasis in Guatemala).* Boletín Chileno de Parasitología (Santiago), 36(1/2), Jan-Jun 1981, 6-9. Span. Refs.

Of 15 383 stool specimens examined at Guatemala's central parasitology laboratory in 1980, 72.6% were positive for *Ascaris*, 18.6% for *Trichuris trichiura*, 2.7% for hookworm, and 1.0% for *Strongyloides stercoralis*. Past helminthic disease control efforts are reviewed and, since these infections now contribute significantly to national morbidity and mortality, suggestions are presented for combatting them more effectively. These include centralizing available data on prevalence at the national level, mass campaigns using more efficient drugs, long-term programmes for improving environmental sanitation, and permanent health education activities to encourage community participation. (Modified journal abstract)

09947 **Akiev, A.K.** *Epidemiology and incidence of plague in the world.* Bulletin of the World Health Organization (Geneva), 60(2), 1982, 165-169. Engl.

From 1958-1979, 46 937 cases of human plague were recorded in the world, but the general downward tendency of plague incidence continued. The current incidence of plague is an indication of the epidemicity of plague in its natural foci. Reports of outbreaks in Africa, Asia, and the Americas indicate that mortality remains high. Four recommendations for epidemiological surveillance are given. (Modified journal abstract)

09948 **American Public Health Association, Strategy Advisory Group on Anti-Malaria Support Strategy for Tropical Africa, Washington, D.C.** *Report of Strategy Advisory Group on Anti-Malaria Support Strategy for Tropical Africa.* Washington, D.C., American Public Health Association, 18 Apr 1980. 150p. Engl.
Abidjan Workshop of the Strategy Advisory Group on Anti-Malaria Support Strategy for Tropical Africa, Abidjan, 27 Mar 1980.

The group's summary conclusions and recommendations open this workshop report, which also contains sections covering: the terms of reference and methodology; malaria in tropical Africa; anti-malaria strategies; constraints against successful anti-malaria programmes; malaria control techniques, approaches, and goals suitable for anti-malaria activities in specific regions; the requirements for implementing malaria control programmes; and mechanisms of cooperation. Annexes comprise lists of participants and African research institutes, discussions on the scope of the work of the field teams and of the appropriateness of US AID involve-

ment, and field team reports from the Congo, Senegal, Togo, Zaire, Kenya, Sierra Leone, the Sudan, and Tanzania. (DP-E)

09949 **Aranda-Pastor, J., Meseché, M.T., Palma, R., Teller, C.H., Salcedo, D.** *Sistemas de vigilancia alimentaria nutricional: un estudio de caso en América Central. (Food and nutrition surveillance systems: a Central American case study).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 90(2), Feb 1981, 114-126. Span. 9 refs.

As part of its national economic and social development plan for 1979-1983, the government of Honduras has devised and is presently pilot-testing a multisectoral food and nutrition surveillance programme that aims to utilize existing information from various sources on food availability, food consumption, and the biological utilization of food to monitor the nutrition situation. This paper describes at length the programme's organization, provides a flow chart for the collection and analysis of information, and reviews problems and achievements to date. Actual data from the programme are not given. (HC-L)

09950 **Arita, I., Breman, J.G.** *Evaluation of smallpox vaccination policy.* Bulletin of the World Health Organization (Geneva), 57(1), 1979, 1-9. Engl. Also published in French.

During 1978 and 1979 the Global Commission for the Certification of Smallpox Eradication will proceed with the verification of smallpox eradication in 31 countries. If no further cases are uncovered, the world will be declared smallpox-free. Efforts are being made to reduce the number of laboratories retaining stocks of variola virus, a threat to the attainment of this goal. Smallpox is unlikely to recur once it has been eradicated. If eradication is confirmed, continuation of smallpox vaccination will be unjustifiable in view of its severe (if infrequent) complications and the expected savings that would result from the termination of vaccination programmes. (Modified journal abstract)

09951 **Baer, E.** *Babies means business.* New Internationalist (Toronto, Ont.), Apr 1982, 22-23. Engl.

The author considers some of the questionable marketing practices of multinational manufacturers of baby formulas, pointing out that their advertising campaigns can raise fears in mothers that actually inhibit the flow of breast milk, that the use of free samples quickly creates dependency, and that misuse of the products can lead almost immediately to malnutrition, dehydration, and death. The international campaign aimed at controlling infant formula companies has greatly increased awareness of the problem among health professionals and lay people. (DP-E)

09952 **Bergström, S.** *Family welfare as health need in Indian population policy.* Tropical Doctor (London), 12(4), Oct 1982, Part 1, 182-184. Engl. 12 refs.

The Indian concept of family welfare is analyzed and compared to the idea of family health; the former is perceived as encompassing the information, educational, and communication (i.e., "non-health") needs of family life, particularly family planning. Some of the potential risks of divorcing family welfare from family health are considered. (DP-E)

09953 **Biddulph, J.** *Measles immunization in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(1), Mar 1982, 3-6. Engl. 23 refs.

After examining morbidity and mortality from measles in Papua New Guinea as well as the social and financial costs of the disease, the author recommends the promotion of measles vaccination programmes in that country. The production of reliable heat-stable vaccines and the improved cold chain have eliminated some of the problems previously encountered by national immunization efforts. (DP-E)

09954 **Bourgeade, A., Delmont, J., Quilici, M.** *Diagnostic immunologique et traitement des leishmanioses. (Immunological diagnosis and treatment of leishmaniasis).* Médecine d'Afrique Noire (Dakar), 26(5), May 1979, 429-431. Fren. 16 refs.

In view of the important progress made during the last 20 years in the field of immunological diagnosis of leishmaniasis, this paper presents a brief look at three of the numerous tests used, namely indirect immunofluorescence, agar immunoprecipitation and immunoenzymatic techniques (such as the ELISA method) for visceral leishmaniasis, and the sero-immunological test used in tegumentary leishmaniasis. This is followed by a short description of the drugs and dosages used in the treatment of the two types, among them glucantime, pentostam, lomidine, amphotericine B, metronidazole, rifampicine, and clofazimine. (EB)

09955 **Cameron, M., Hofvander, Y.** *Malnutrition: major cause of disease and death in Third World children.* Development Digest (Washington, D.C.), 19(2), Apr 1981, 29-40. Engl.

Nutritional deficiences can cause diseases in developing country infants both directly and indirectly, by making them more susceptible to other infections. The greatest mortality is due to diarrhea, for which the most important treatments are rehydration and sustenance. The symptoms of protein-calorie malnutrition, particularly kwashiorkor and marasmus, are described and suggestions on screening for malnutrition based on weight charts and a knowledge of high risk factors are given. (DP-E)

09956 **Chen, P.S.** *What can be learned from studying Asian health problems?* Environmental Health Perspectives (Research Triangle Park, N.C.), 44, Apr 1982, 129-133. Engl.

Population growth, malnutrition, cancer, genetic and infectious (mainly parasitic diseases, diarrhea, tubercu-

losis, and leprosy) diseases, and radiation exposure are among the Asian health problems briefly examined in this article. (DP-E)

09957 **Clarke, V. de V., Taylor, P., Sviridov, N., Richardson, M.** *Importance of an integrated approach to the control of bilharzia.* Central African Journal of Medicine (Harare), 27(10), Oct 1981, 198-202. Engl.

In this discussion of bilharzia transmission control measures, the authors look at six options available in endemic areas containing water-bodies with uncontrolled human access. These include full volume molluscicide application, molluscicidal treatment of contact points, mass chemotherapy of people, facilities to reduce contaminatory activities, health education, and controlled human access. A number of recommendations for focal control of bilharzia are suggested in each of the following categories: preventing viable schistosome eggs from reaching the water, limiting number of host snails present in water, and preventing susceptible persons from having exposure to cercariae. Two examples of control measures are discussed: the vector snail collections between September 1978-August 1980 at 10 recreational sites at Lake McIlwaine in Salisbury, Rhodesia, and the rodent immersion studies between September 1978-January 1980 in the same area. (EB)

09958 **Contreras Dueñas, F.** *Lepra se cura cada vez con mayor frecuencia; de acuerdo con las recientes progresos científicos tienen que terminar todas las enfermedades incurables. (Leprosy is being cured more and more frequently; according to recent scientific advances all incurable diseases must come to an end).* Actas Dermo Sifiliográficas (Madrid), 12(9/10), Sep-Oct 1981, 488-504. Span.

The history of leprosy treatment in Spain, and that of other diseases that were once considered incurable, is briefly traced with the aid of a case history. (RMB)

09959 **Croll, N.A., Ghadirian, E., Sakul, N.C.** *Exposure and susceptibility in human helminthiasis.* Tropical Doctor (London), 12(3), Jul 1982, 136-138. Engl. 8 refs.

This paper presents six graphs of data from various studies of the distribution of different kinds of intestinal parasitism in populations in Iran and elsewhere. In each case, a small proportion of the population was found to harbour the bulk of the worm load. An adequate explanation for this has yet to be found and it is suggested that physicians working in areas of endemic helminthiasis try to document associations between wormy persons, exposure, and susceptibility in order to shed light on the subject. The ability to identify these persons and to treat them would permit direct and optimal application of limited resources for both humanitarian and epidemiological reasons. (HC-L)

09960 **Crouch, P.R.** *Review of intestinal parasitism and nutrition.* Papua New Guinea Medical Journal (Port Moresby), 25(1), Mar 1982, 43-49. Engl. 52 refs.

Intestinal parasites can contribute to nutritional deficiencies in their human hosts by competing for nutrients and by causing malabsorption, blood loss from the gut, or excess nutrient utilization. *Entamoeba histolytica, Giardia lamblia,* hookworm, *Strongyloides stercoralis* and *S. Fülleborni, Ascaris lumbricoides,* and *Trichuris trichuria* are examined in terms of these activities with special reference to Papua New Guinea. (DP-E)

09961 **d'Agostino, M., Masse-Raimbault, A.-M.** International Children's Centre, Paris. *Small children; their initiation to life.* Children in the Tropics (Paris), (135/137), 1982, 2-112. Engl.
Also published in French.

This issue concentrates on the development of children aged 2-5 years. The section on child education covers child development and play (both the sensori-motor and symbolic forms), the child and the development of communication through its various stages, and the child and expression. Examples of programmes for educating small children in a collective framework are given from Benin and India. Technical notes describe an international chart for child growth, the observation of children, the building of a short-term programme, an investigation sheet used for children aged 3-6 years in Benin, and an initiation to nutrition. (DP-E)

09962 **Davidson, G.** *Who doesn't want to eradicate malaria?* New Scientist (London), 96(1336), 16 Dec 1982, 731-736. Engl.

The author attributes the world wide resurgence of malaria to a 1969 WHO policy decision to cease efforts to eradicate the disease as an unattainable goal and revert instead to national control measures aimed at containing malaria at manageable levels. Control measures, however, are ineffective for a number of operational reasons, such as parasite resistance to available drugs and the impossibility of spraying all existing vector breeding sites. Some alternatives to chemicals, including environmental, biological, and genetic control methods, are discussed and considered. (DP-E)

09963 **de Souza Dias, L.C.** *Geohelmintiasis en Brasil. (Soil-transmitted helminthiasis in Brazil).* Boletín Chileno de Parasitología (Santiago), 36(1/2), Jan-Jun 1981, 27-28. Span. 9 refs.

A 1968 examination of 2 440 000 Brazilian patients revealed that *Ascaris* was present in 63.4%, *Trichuris trichiura* in 39.1%, hookworm in 28.3%, and *Strongyloides stercoralis* in 2.4%. The high prevalence and distribution of these helminthic infections are discussed with reference to the age and socioeconomic and anitary conditions of the affected population. Control measures are urgently needed. (Modified journal abstract)

09964 **DeMaeyer, E.M.** *Role of WHO in the control of nutritional anaemia.* Progress in Clinical and Biological Research (New York), 77, 1981, 363-370. Engl.

Among the strategies WHO has adopted to combat nutritional anaemia are food fortification and iron supplementation, particularly for pregnant women and young children. The advantages, disadvantages, costs, and implementation of these strategies are briefly discussed. (DP-E)

09965 **Diesfeld, H.J.** *Importierte Krankheiten und rztliche Untersuchungen vor und nach Tropenaufenthalt. (Imported diseases and medical examinations before and after a stay in the tropics).* Frankfurt am Main, Germany FR, Peter D. Lang, Medizin in Entwicklungsländern Series, Vol. 6, 1980. 180p. German. Refs.
Tenth Annual Conference of the German Society for Tropical Medicine, Heidelberg, Germany, 22-24 Mar 1979.

The development of travel and tourism in tropical regions and the subsequent increased possibility of importation of tropical diseases prompted the German Society for Tropical Medicine to examine in depth these problems at its 10th annual congress. Aimed at doctors, health ministries, medical services, and employers' insurance associations, the 21 conference papers contained in this monograph cover the following topics: imported diseases (from the Middle East, Africa, Southeast Asia, Latin America, and the Caribbean); the malaria situation, malaria prevention, and therapy; medical examinations before and after a stay in the tropics; gastrointestinal and viral infections; eye and skin diseases; and medical aspects of a long-term stay in the tropics. Maps, graphs, a bibliography, tables, and statistical data are included. (EB)

09966 **Dunn, F.L.** *Behavioural aspects of the control of parasitic diseases.* Bulletin of the World Health Organization (Geneva), 57(4), 1979, 499-512. Engl.

This paper deals with the prospects for greater use of the methods and orientations of the behavioural sciences in parasitic disease research and control programmes. Various categories of health-related behaviour and kinds of research objectives are reviewed. Special attention is given to psychosocial cost-benefit studies, to analyses of control sectors, and to the formulation of a control philosophy. Finally, some specific behavioural research needs are discussed for high priority parasitic diseases, i.e., schistosomiasis, filariasis, trypanosomiasis, and malaria. (Modified journal abstract)

09967 **Enwonwu, C.O.** *Interface of nutrition and dentistry in pre-industrialized tropical countries.* Tropical Dental Journal (Dakar), 1(2), 1978, 19-44. Engl. 147 refs.

The author reviews reports on nutrition and dental status in a number of countries, with special reference to Nigeria. The reasons for the low prevalence of dental caries in Nigerian villagers are discussed and, in contrast, emphasis is laid on the strong association between a high prevalence of periodical disease and low socioeconomic status. He stresses that, as the main focus of dentistry shifts from a disease-oriented to a health-oriented discipline, with emphasis on prevention rather than cure, the crucial role of nutrition should not be ignored. Statistical data are included. (Modified journal abstract)

09968 **Ette, S.I., Ofodile, F.A., Oluwasanmi, J.O.** *Vitamins and trace elements profiles in chronic leg ulcers in Nigerians.* Tropical and Geographical Medicine (Dordrecht, Netherlands), 34(1), Mar 1982, 73-75. Engl. Refs.

This report discusses vitamins and trace elements profiles in 25 Nigerians suffering from chronic leg ulcers. The levels of vitamins A, C, and E were significantly lower than levels in healthy Nigerian controls. Copper values were almost the same in the two groups, but the results indicated deficiency of zinc. The relationship of these nutrients to wound healing is discussed; the addition of vitamin E in the management of leg ulcers is recommended. (Modified journal abstract)

09969 **Fried, W.** University of Chicago, Sickle Cell Center, Chicago, Ill. *Comparative clinical aspects of sickle cell disease.* New York, Elsevier North Holland, 1982. 191p. Engl. Refs.
Second Annual Comprehensive Sickle Cell Center Symposium on the Comparative Clinical Aspects of Sickle Cell Disease, Chicago, Ill., 21-22 Oct 1980.

This volume contains the work presented at a symposium on sickle cell anaemia held at the University of Chicago (USA) on October 21-22, 1980. Following the keynote address, the symposium was organized into three parts. The 1st contained reports by physician-scientists of their observations of the specific clinical features of the disease in patients from various geographic locales. The 2nd reported on the manifestations of sickle cell disease in various organ systems. The 3rd dealt with the efficacy of some currently available therapy for patients with sickle cell disease and on the rationale for identifying and screening potentially useful antisickling agents. (Modified journal abstract)

09970 **Fujigaki Lechuga, A., Alfaro Rodríguez, O., Mougrabi Mizrahi, M.** *Vacunas tradicionales (revisión de esquemas de vacunación). (Traditional vaccinations — review of vaccination schedules).* Salud Pública de México (Mexico City), 22(5), Sep-Oct 1980, 531-536. Span.

This paper presents and discusses 11 vaccination schedules from eight countries — Austria, Canada, UK, Hungary, Yugoslavia, Cameroon, USA, and Mexico — and comments on some of the discrepancies observed and peculiar characteristics of certain vaccinations (i.e. whooping cough and measles). A list of eight contraindications to vaccination that are accepted in all countries is given. (HC-L)

09971 **Gopalan, C.** *Promoting child health and nutrition in India.* Food Policy (Guildford, UK), 8(1), Feb 1983, 23-30. Engl.

Inadequate advice to mothers in poor rural Indian communities about breast milk supplements could allow progressive erosion of breast-feeding practices in the face of aggressive promotion from baby food manufacturers. Health workers need better information about possible supplements produced from locally available foods if nutrition education programmes are to succeed. The author warns of the detrimental effect of the deemphasis on school nutrition programmes in India and points to the need for a nutrition component as an integral part of rural employment/development programmes. (Modified journal abstract)

09972 **Greep, R.O., Koblinsky, M.A., Jaffe, F.S.** *Fundamental studies — reproduction sciences.* Jakarta, Badan Koordinasi Keluarga Berencana Nasional Pusat, 1979. 14p. Engl.

This paper consists of a list of gaps in the current knowledge of the reproductive sciences related to fertility control as cited by scientists active in the field. Divided into 23 sections, they range from the very detailed to broad conceptual hiatuses. In each section the major areas where scientific knowledge is incomplete or insufficient have been listed; however, it must be noted that some overlapping of points does occur in this compilation. (EB)

09973 **Haide, M., Ye, G.Y.** *General condition of the work on the prevention and treatment of leprosy in China.* International Journal of Leprosy (Washington, D.C.), 49(2), Jun 1981, 218-223. Engl.

The authors examine the principles and measures affecting the prevention and treatment of leprosy in the People's Republic of China, particularly propaganda and health education, screening methods, mass treatment, isolation of sources, protection of contacts, the exchange of scientific information, and research. After briefly discussing the results of current programmes, they present four conclusions concerning the success of these programmes and consider problems requiring attention in the future. (DP-E)

09974 **Halstead, S.B.** *Dengue haemorrhagic fever — a public health problem and a field for research.* Bulletin of the World Health Organization (Geneva), 58(1), 1980, 1-21. Engl.
Also published in French.

Dengue haemorrhagic fever/dengue shock syndrome (DHF/DSS) is an enigmatic and growing public health problem confined at present to countries of Southeast Asia; over 350 000 patients have been hospitalized and nearly 12 000 deaths have been reported since 1956. This article reviews the antecedents and the epidemiology of the disease as well as various control measures that have been tested. Research into the identification of risk factors is advocated; a clearer understanding of the pathogenesis of DHF/DSS may be required to provide guidelines for safe and lasting immunoprophylaxis in man. A distribution map and some statistical data are included. (Modified journal abstract)

09975 **Hamand, J.** *Rwanda: too many people, too little land.* World Health (Geneva), Jun 1982, 12-15. Engl.

Land shortages caused by Rwanda's uncontrolled population growth are causing increasingly high levels of malnutrition in that country; 50% of children aged less than 5 years are affected. Efforts to combat this problem include a network of 130 nutrition centres that encourage the home husbandry of small animals as a protein source, some 105 health centres (many of them run by missionaries), and the *Office National de la Population*, which coordinates family planning activities. Past efforts such as the measles immunization campaign have demonstrated that all these health services can take effective action when they work together. (DP-E)

09976 **Harfouche, J.K.** *Health care problems of the young child in a developing ecological context.* Bulletin of the World Health Organization (Geneva), 57(3), 1979, 387-403. Engl.
Also published in French and Russian.

The health needs of young children in developing countries are largely unknown because of the lack of health statistics. The health of women of child-bearing age is of vital importance to the health of children. Intrauterine growth retardation is important to birth weight, a matter of public health significance because it is directly associated with perinatal mortality, morbidity, and subclinical damage. In addition to the usual dangers, the rapidly changing environment and socioeconomic situation in many areas place added stress on mother and child. Although societies are developing a wide range of adaptive measures to assist mothers, there are complex problems of implementation. (Modified journal abstract)

09977 **Harry, T.O., Ogunmekan, D.A.** *Optimal age for vaccinating Nigerian children against measles; I: neonatal antibody profile and subsequent susceptibility to measles.* Tropical and Geographical Medicine (Amsterdam, Netherlands), 33(4), Dec 1981, 375-378. Engl. Refs.

The decline of maternally-acquired haemagglutination-inhibiting antibodies against measles virus in Nigerian children was studied. At birth, all of the 303 children whose cord blood serum was tested had measurable antibodies. The antibody titre remained detectable in 100% of the children at 4 months of age, in over 90% at 5 months, in 35% at 6 months, in 50% at 7 months, and in 58% at 8 months. This indicates a slight but progressive improvement in the immune status of the children. These findings provide a serological basis for starting antibody measles immunization of Nigerian children at six months. (Modified journal abstract)

09978 **Herrer, A., Hidalgo, V., Meneses, O.** *Leishmaniasis tegumentaria e insecticidas en el Perú; reactivación de la uta durante los últimos años. (Use*

of insecticides and cutaneous leishmaniasis in Peru: reactivation of the disease in recent years). Revista do Instituto de Medicina Tropical de São Paulo (São Paulo, Brazil), 22(4), Jul-Aug 1980, 203-206. Span.

As a result of widespread insecticiding carried out from 1950-1970, cutaneous leishmaniasis almost disappeared from the eastern watershed of Peru. Evidence of a gradual resurgence of the disease, however, appeared between 1973-1977 with the registration of 46 cases among the population of a small valley located some 64 km from Lima. This paper presents the preliminary findings of an on-going study of the disease, noting slight changes in its epidemiology, mainly, the move of the principal focus or source of infection from the domestic situation to the uncultivated areas. (HC-L)

09979 **Hoekenga, M.T.** *Role of pharmaceuticals in the total health care of developing countries.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 32(3), May-Jun 1983, 437-446. Engl. 18 refs.
Thirty-first Annual Meeting of the American Society of Tropical Medicine and Hygiene, Cleveland, Ohio, 9 Nov 1982.

The author addresses six issues relevant to the role of drugs in developing country health care. These are: the health problems of developing countries; past and current programmes for the development of pharmaceuticals; the relationship of drugs to other health problems; criticisms of the pharmaceutical industry, which he largely discounts; problems and constraints in developing drugs by pharmaceutical firms, particularly for tropical diseases; and ways of encouraging the pharmaceutical industry to pursue tropical medicine in the future, such as financial incentives, anti-trust laws, and improved training programmes. Statistical data are included. (DP-E)

09980 **Hoffman, D.R., Phillips, S.M., Cook, J.A.** *Vaccine development for schistosomiasis: report of a workshop.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(6), Nov-Dec 1981, 1247-1251. Engl. 49 refs.
Workshop on the Development of an Attenuated Vaccine for Schistosomiasis, New York, 11 Apr 1980.

This report of a workshop on the development of an attenuated vaccine for schistosomiasis briefly reviews the recent progress toward a vaccine and discusses further work that must be done in the areas of technical feasibility, safety, and logistics. (Modified journal abstract)

09981 **Hopkins, D.R., Koplan, J.P., Hinman, A.R., Lane, J.M.** *Child health: the case for global measles eradication.* Lancet (London), 19 Jun 1982, 1396-1398. Engl. 21 refs.

An estimated 900 000 children in the developing countries die every year of measles, and therapy for measles and its complications is a major drain on scarce health resources. Three factors, however, now militate in favour of the global eradication of measles: the availability of a heat-stable, cheap, and effective vaccine; the achievement of the interruption of measles transmission in some parts of the USA and Africa; and the existence of a mechanism for delivery to which most countries are already committed — the WHO expanded programme on immunization. This paper discusses the differences and similarities between the successful smallpox eradication programme and the proposed measles eradication programme and the benefits to be gained from the latter. (HC-L)

09982 **Huston, A.F.** *Preventable crippling in the children of developing countries.* Canadian Journal of Public Health (Ottawa), 72(3), May-Jun 1981, 166-169. Engl.

After reviewing the health services aimed at preventing disabilities in the children of both developed and developing countries, the author briefly discusses the main causes of crippling in Jamaica, Haiti, Bangladesh, Nepal, and Thailand. It is suggested that three of these causes can be affected and/or eliminated by organized programmes of prevention, namely: injuries; bone infections, both tuberculosis and pyogenic; and poliomyelitis. Some guidelines for setting up such preventive programmes are presented. (DP-E)

09983 **Johns Hopkins University, Population Information Program, Baltimore, Md.** *Breast-feeding, fertility, and family planning.* Population Reports (Baltimore, Md.), Series 1(24), Nov-Dec 1981, J525-J575. Engl. 684 refs.
Also published in French and Spanish.

This text explains how breast-feeding affects fertility and suggests ways that health and family planning personnel can help encourage mothers to breast-feed. The use of contraceptives during breast-feeding is also examined. Tables in the appendix offer results of studies on the impact of oral contraceptives on breast-feeding. (Modified journal abstract)

09984 **Johnson, A.A., Latham, M.C., Roe, D.A.** *Nutritional anemias in the English-speaking Caribbean: a review of the literature.* American Journal of Public Health (Washington, D.C.), 72(3), Mar 1982, 285-289. Engl. 20 refs.

A review of the published literature (20 references) on nutritional anaemias in the English-speaking Caribbean was carried out. Published articles on the larger islands such as Jamaica and Trinidad indicate that nutritional anaemias are most prevalent among women of childbearing age. Iron and folate deficiencies and, to a much lesser extent, protein deficiency resulting from insufficient dietary intakes of these nutrients are the major nutritional factors contributing to this anaemia. (Modified journal abstract)

09985 **Jones, M.** *Biggest contraceptive in the world.* New Internationalist (Toronto, Ont.), Feb 1982, 20. Engl.

Bottle-feeding increases the fertility of developing-country women in two ways: by discouraging breast-feeding's natural contraceptive effects and by contributing to infant mortality, so that parents feel the need to replace lost children. A number of studies are described that have attempted to measure more precisely the relationship between breast-feeding and infertility in Bangladesh, Mexico, and Botswana. It is concluded that, in general, one month of breast-feeding adds one week to the birth interval and often proves to be more effective than artificial forms of birth control. (DP-E)

09986 **Katz, S.L.** *Measles: a world-wide update.* World Health (Geneva), Dec 1982, 14-15. Engl. Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The 1982 International Symposium on Measles Immunization, held at the Washington (USA) headquarters of the Pan American Health Organization, brought together experts on this disease from all over the world. This article sums up the proceedings and the present state of knowledge of this childhood disease — one of the six targeted by WHO's Expanded Programme on Immunization. The author concludes that world wide immunization against measles is possible; the challenge is to exploit the available vaccines and to overcome the remaining economic, logistical, and attitudinal barriers. The efforts already in motion must continue to expand and new ones must be initiated. (DP-E)

09987 **Kloos, H., Lemma, A.** *Epidemiology of* Schistosoma mansoni *infection in Tensae Berhan: human water contact patterns.* Ethiopian Medical Journal (Addis Ababa), 18(3), 1980, 91-98. Engl. 12 refs.

Surveys of human water contact and contamination behaviour in relation to *Schistosoma mansoni* infection were made at the rivers of Tensae Berhan (Ethiopia) as part of a schistosomiasis control programme. Of the 30 925 water contacts observed, 90.6% were of the exposure type, only 0.4% were of the contaminative type, and 9% involved both exposure and contamination. In order of frequency and following a diurnal pattern, these activities may cause transmission: for males, river fording, washing of extremities, and fetching water on donkey-back; for females, fetching water in clay jars, river fording and washing of extremities, laundering; for young boys, swimming. The relationship between forms of water contact and *S. mansoni* infection is evaluated. Statistical data are included. (Modified journal abstract)

09988 **Kouznetsov, R.** *Use of drugs for malaria control in tropical Africa.* Bulletin of the World Health Organization (Geneva), 57(4), 1979, 535-539. Engl.

In tropical Africa, particularly in rural areas, chemotherapy is the main and often the only feasible method of malaria control. This article reviews experience with a number of chemotherapeutic drugs; chloroquine has proved to be the most effective and, as long as the malarial parasites remain susceptible to it, is the drug of choice. In most countries, activity is limited to the administration of antimalarial drugs to sick people; attempts have been made to extend the coverage of drug administration but such efforts depend heavily on the degree of involvement of voluntary collaborators, primary health workers, and communities. (Modified journal abstract)

09989 **Laditan, A.A., Alausa, K.O.** *Problems in the clinical diagnosis of typhoid fever in children in the tropics.* Annals of Tropical Paediatrics (Liverpool, UK), 1(3), 1981, 191-195. Engl. 22 refs.

From January 1976-December 1978, *Salmonella typhi* was isolated from the blood cultures of 93 children aged less than 14 years who were admitted to the pediatric ward of University College Hopital, Ibadan, Nigeria. A clinical diagnosis on admission of typhoid fever was made on only 14 (21.8%) of the 64 children for whom records were kept. Provisional diagnoses on admission ranged from typhoid fever to septicaemia, pyrexia of undetermined origin, meningitis, sickle cell disease, kwashiorkor, febrile convulsions, and bronchopneumonia. Diarrhea and vomiting were common. The authors suggest that, where typhoid fever is endemic, any child with unremitting fever, after adequate antimalarial chemotherapy, should be treated for typhoid fever by chloramphenicol or co-trimoxazole. Statistical data are included. (Modified journal abstract)

09990 **Lafaix, C., Vincent-Ballereau, F.** *Principes généraux de l'antibiothérapie en milieu tropical. (Principles for using antibiotics in a tropical environment).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 74(6), Nov-Dec 1981, 709-713. Fren. 8 refs.

In tropical countries, because bacterial infection is prevalent and constitutes a major cause of morbidity and mortality, antibiotic therapy should be considered an important component of primary health care treatment centres. This paper looks at three main approaches for the rational use of antibiotherapy: (a) standardizing drug therapy by examining the epidemiological, clinical, bacteriological, and therapeutic aspects; (b) choosing antibiotics with the best cost-effective return; and (c) developing and maintaining good organization and decentralization in the distribution of medicines. An important role in this objective must be assumed by medical practitioners, pharmacists, drug manufacturers, and national and international medical organizations alike. (EB)

09991 **Latham, M.C.** *Infant feeding in national and international perspectives: an examination of the decline in human lactation, and the modern crisis in infant and young child feeding practices.* Annals of the New York Academy of Sciences (New York), 300, 1977, 197-209. Engl. 19 refs.

This paper examines the geographical distribution of breast-feeding and bottle-feeding, respectively, and explores the reasons why the former has declined in some

(UK, France, and USA) and not in other (USSR and the People's Republic of China) industrialized countries. It then recapitulates the dangers of bottle-feeding in low-income countries, suggesting that governments intervene to limit the promotion and sale of artificial milk substitutes and to promote breast-feeding. If the transition to bottle-feeding seems inevitable, however, governments should distribute milk substitutes free of charge and special weaning foods at no more than the cost per unit of locally-available protein. Other topics discussed, with reference to recent literature, include water requirements of infants, milk in the treatment of protein-calorie malnutrition, and fortification of foods with vitamin A. (HC-L)

09992 **Maichuk, Y.F.** *Epidemiology of blindness in the Middle East.* Revue Internationale du Trachome et de Pathologie Oculaire Tropicale et Subtropicale (Annonay, France), 57(4), 1980, 21-37. Engl. 18 refs.

Blindness and visual impairment are major health problems in the Middle East; the economic and social consequences are yet to be assessed. WHO has been involved in local, long-term, communicable eye disease control programmes that have helped to reduce blindness. Mass treatment campaigns, extensive health education programmes, and mobile eye units are recommended for rural areas. The author emphasizes the importance of formulating a national policy and a structured comprehensive long-term plan in every country on the basis of information on the major local causes of blindness. Statistical data are included. (Modified journal abstract)

09993 **Mao, S.P., Shao, B.R.** *Schistosomiasis control in the People's Republic of China.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md), 31(1), Jan-Feb 1982, 92-99. Engl. 10 refs.

Evidence exists that schistosomiasis japonica has been present in the People's Republic of China for 2 200 years. Studies also indicate that there were 10 million patients in 345 *hsiens* (counties) before 1949. Present control efforts are described in terms of strata of endemic areas: plains region, mountainous and hill region, and marshland and lake region. In the plains region, relatively few patients require treatment. In the other regions, however, eradication remains a problem. Treatment methods, which stress applied research and integrating technical work with the involvement of the population, are described. Some statistical data are included. (Modified journal abstract)

09994 **Marbrouk, R.** *Viral ocular infections now in Tunisia.* Revue Internationale du Trachome et de Pathologie Oculaire Tropicale et Subtropicale (Annonay, France), 57(4), 1980, 63-70. Engl. 11 refs.

The author discusses the current epidemiological situation in Tunisia with respect to viral or suspected viral ocular infections. Trachoma seems to be much less agressive at present and, because of topical therapeutic agents and improved living conditions, is now regressing. In the case of specific viral infections, measles vaccination has eliminated the widespread occurrence and grave risks of this disease. Conversely, herpes zoster, herpes simplex, hemorrhagic keratoconjunctivitis, and adenovirus, which are markedly increasing or perhaps being more accurately diagnosed, constitute a significant health problem in North Africa today. (Modified journal abstract)

09995 **Moore Lappé, F., Collins, J.** *Food first; beyond the myth of scarcity. Rev. ed.* New York, Ballantine Books, Sep 1979. 619p. Engl.

Intended, according to the authors, to arouse controversy over the issues its addresses, this book deals with 50 questions divided into 10 parts treating these subjects: the scarcity scare, blaming nature, the colonial inheritance, modernizing hunger, the inefficiency of inequality, the trade trap, the myth of food power, world hunger as big business, the helping handout, and food self-reliance. There are notes, an index, and two appendices containing guidelines for organizing for change, action groups and their publications by issue, and recommended books, periodicals, and films. In the introduction, the authors discuss some of the simplifications and misinterpretations of the ideas they expressed in the earlier edition; these were generally answered by expanding the appropriate sections of this book. (DP-E)

09996 **Morley, D.** *Health and nutrition in early child development: producing change through education; aids to programming UNICEF assistance to education.* Paris, Unesco, Unit for Co-operating with UNICEF and WFP, Education and Primary Health Care, No. 13, Oct 1982. 12p. Engl.

The nutritional needs of young children in developing countries are considered with emphasis on the relationship between nutrition and child mortality. The energy density of the food consumed is especially important; for example, to make unrefined cereals soft enough for children to consume, water must be added, producing a food of high bulk but low energy. As a result, even during the 2nd year of life, some 50% of a child's energy intake may still be from breast milk. The provision of comprehensive health and the possibility of producing change through education are also discussed; the author points out that most developing countries could cut their infant death rates in half by providing all girls with 5 years of education. (DP-E)

09997 **Morley, D.** *Child health in Africa: ripe for change.* In Ray, I., Shinnie, P., Williams, D., eds., Into the 80s; the Proceedings of the 11th Annual Conference of the Canadian Association of African Studies, Vol. 2, Vancouver, Tantalus Research, B.C. Geographic Series, No. 32, 1981, p.196-207. Engl. 10 refs.
Eleventh Annual Conference of the Canadian Association of African Studies, Calgary, Alta., 11-14 May 1981.

As an aid to African policy-makers planning nutrition programmes for children, the author examines related

issues such as linking nutrition with other health services, weaning foods, immunization and oral rehydration, child health clinics, and village health workers and medical assistants in Africa. The training of these auxiliaries should emphasize simple techniques requiring a minimum of equipment (e.g., using fingers rather than strips of plastic to measure midarm-circumference) and educational methods such as distance learning. Appendices contain illustrations and statistical data. (DP-E)

09998 **Neva, F.A., Miller, L.H., Sher, A.F.** *Vaccines against malaria and schistosomiasis: a conference report.* Public Health Reports (Rockville, Md), 96(6), Nov-Dec 1981, 523-527. Engl.
Sciences Writers' Seminar on World Health Problems: Prospects for the Development of Vaccines Against Malaria and Schistosomiasis, Bethseda, Md., 5 May 1981.

This 1981 seminar considered research approaches, obstacles, and advances in the development of vaccines against parasitic diseases, particularly schistosomiasis and malaria, which are becoming increasingly resistant to conventional disease control measures. This article summarizes three of the seminar reports on these topics: constraints to the control of schistosomiasis and malaria, with emphasis on the unpredictability of the immune response; multifaceted research approaches to malaria vaccine; and immunity and immune evasion in schistosomiasis. (DP-E)

09999 **New Internationalist, Toronto, Ont.** *Evidence from Zimbabwe.* New Internationalist (Toronto, Ont.), Apr 1982, 18. Engl.

Based on a January 1982 report from Zimbabwe's Ministry of Health, this article examines some of the techniques used by Nestlé to promote its products in that country in direct contravention of WHO recommendations. These practices include visiting health facilities to talk to pregnant women and to distribute free samples, gifts, and advertising materials such as calendars, leaflets, and a Nestlé Road to Health card that advises mothers to bottle-feed if their babies' weight falls below a certain standard. Because of public enthusiasm for them, the Zimbabwe government considers Nestlé's activities to be particularly dangerous and misleading. (DP-E)

10000 **New Internationalist, Toronto, Ont.** *Bottlefeeding on trial.* New Internationalist (Toronto, Ont.), Apr 1982, 10-11. Engl.

This four-part article presents data on the victims of bottle-feeding from Papua New Guinea, Egypt, the UK, Brazil, and the Philippines, concluding that, in the developing world, babies breast-fed for less than 6 months are 5-10 times more likely to die in the next 6 months than babies breast-fed for 6 months or more. The reasons why developing country women find it difficult to prepare germ-free artificial feeds are examined and the evidence supporting charges of unethical advertising of infant foods is outlined. The recommendations contained in WHO's international code for marketing breast-milk substitutes are listed. (DP-E)

10001 **New Scientist, London.** *Is prevention or cure the best control for cholera?* New Scientist (London), 94(1306), 20 May 1982, 490. Engl.

Because cholera is amenable to management by simple means — a combination of oral rehydration therapy and the administration of antibiotics such as tetracycline — and prevention through the provision of clean water supplies, it has not figured in the WHO special programme for research into tropical diseases. British scientists are now working, however, on a live vaccine shifting the balance in favour of prevention. As far as the cure is concerned, recent studies are cited to show that oral rehydration — rather than intravenous rehydration — remains the treatment of choice in the developing countries. (HC-L)

10002 **Ogunmekan, D.A., Harry, T.O.** *Optimal age for vaccinating Nigerian children against measles; II: seroconversion to measles vaccine in different age groups.* Tropical and Geographical Medicine (Amsterdam, Netherlands), 33(4), Dec 1981, 379-382. Engl. Refs.

Blood samples were taken from 98 Nigerian children aged 5-9 months before they were given measles vaccine and again 6-8 weeks after vaccination and tested for haemagglutination-inhibition antibodies to measles virus. It was found that the seroconversion rate was significantly lower in infants aged less than 7 months. The results suggest that, although some children immunized at 6 months show seroconversion, the proportion is too small to justify extensive immunization at this age. Nigerian children should be immunized at 8-9 months. Statistical data are included. (Modified journal abstract)

10003 **Okeahialam, T.C.** *Problems in tropical paediatrics.* Postgraduate Doctor-Middle East (Richmond, UK), 5(9), 1982, 396-405. Engl.

Infection and malnutrition are still the major pediatric problems encountered in tropical Africa; most can be prevented. Increased knowledge of the benefits of modern medicine has led to an awareness of other major problems in neonatology, pediatric cardiology, and oncology. The prevalence of these diseases is related to poor socioeconomic status and lack of effective preventive health measures, particularly in pediatrics. There is an urgent need for a review of priorities in health care delivery in tropical Africa, with greater emphasis on primary health care, maternal and child health programmes involving health education, antenatal care, immunization, and family planning. (Modified journal abstract)

10004 **Omawale** *Nutrition problem identification and development policy implications.* Ecology of Food and Nutrition (London), 9(2), 1980, 113-121. Engl. 15 refs.

The past 20 years have demonstrated the inability of

general growth strategies to eliminate under-nutrition and the need for a more group-targeted approach to nutrition planning has become apparent. Such an approach seeks to identify groups at risk from a particular form of malnutrition on the basis of causative socioeconomic conditions (e.g. occupation of head of household) rather than physiological characteristics (e.g. preschool children) or income alone. This paper describes the application of the functional classification of nutritional risk to data from the 1974 Multipurpose Laguna Rural Household Survey in the Philippines and points out its implications for future development and nutrition policy. (HC-L)

10005 **Ormerod, W.E.** *African husbandman and his diseases: a moral dilemma posed by development versus ecological stability.* Rural Africana (East Lansing, Mich.), (8/9), Fall-Winter 1980-1981, 133-147. Engl. Refs.

The author contends that, while many attempts at development in the tropics, especially in the health field, may greatly benefit individuals, they may also disturb the relatively precarious African environment to the extent that African farmers may stand to lose far more than they gain from the implementation of disease control programmes. To support this argument, he presents the evidence of the agricultural paradox (Africa's higher potential but lower actual food productivity) in relation to disease and discusses those diseases common to African farmers. Instead of mass campaigns to eradicate diseases and the resulting environmental instability, the author recommends more intensive treatment of infected individuals. (DP-E)

10006 **Pant, C.P., Rishikesh, N., Bang, Y.H., Smith, A.** *Progress in malaria vector control.* Bulletin of the World Health Organization (Geneva), 59(3), 1981, 325-333. Engl.

Also published in French.

The use of insecticides in malaria control must be modified because of the resistance which has developed in the vectors. The ecology and behaviour of each vector species, discussed in detail in this paper, must be understood if effective control is to be achieved. The authors also consider the financial aspects of the problem, environmental management, genetic control, and biological control. They advocate an integrated, multi-faceted approach to the problem with greater involvement of local and national specialists, technical cooperation among countries, self-help, and improved health education and manpower training. (DP-E)

10007 **Paula Motta, C.** *Leprosy in the Americas region (AMRO).* Leprosy Review (New York), 51(4), 1980, 285-294. Engl.

Although leprosy in the Americas could be considered of median prevalence, there are some limited foci where transmission seems to be comparable with some African or Asian foci. In many American countries, the leprosy problem does not have priority related to the size of the problem and relative public health importance. One of the main constraints to implementing control programmes is a general shortage of funding sources coupled with deficient training (and motivation) of personnel. The financial assistance offered by the Japanese shipbuilding industry and coordinated by WHO should help. Statistical data are included. (Modified journal abstract)

10008 **Pollitt, E.** *Child poverty in South America: reflections on its magnitude and the basic-need developmental approach; a retrospect on the International Year of the Child.* Archivos Latinoamericanos de Nutrición (Caracas), 31(2), Jun 1981, 235-249. Engl. 15 refs.

Meeting of the American Association for the Advancement of Science, San Francisco, Cal., Jan 1980.

Also published in Spanish as *Pobreza en la población infantil de América del Sur* in *Boletín de la Oficina Sanitaria Panamericana*, 93(6), Dec 1982, 580-585.

In his discussion of the nature and magnitude of poverty among children in South America, the author considers the following data: child population distribution, percentage of households below the poverty line, estimation of child population below poverty line, infant mortality, relationship between infant mortality risk and education of mother, and theoretical growth curves for standard and malnourished children exposed to intervention programmes. A brief comment is given on some of the issues raised regarding intervention strategies, particularly as they relate to the basic-need approach to development. It is felt that intervention programmes that focus on selected basic needs of infants and children (e.g. health, nutrition, psychological and mental development), without attending to the general context in which these needs are exhibited, are oversimplifications of complex social and economic problems. Success of intervention programmes will be jeopardized unless the needs of all members of the family and community are also met. (EB)

10009 **Reinert, P.** *Développement staturo-pondéral et psychomoteur de l'enfant. (Height, weight, and psychomotor development of the child).* Développement et Santé (Paris), 39, Jun 1982, 14-17. Fren.

This paper describes the various indicators of child growth (weight-for-age, height-for-age, and head-circumference-for-age) and the use of a chart in monitoring them and in detecting growth abnormalities such as kwashiorkor. It also includes a chart indicating the normal zone during which the various landmarks of psychomotor development occur. (HC-L)

10010 **Sabin, A.B.** *Vaccination against poliomyelitis in economically underdeveloped countries.* Bulletin of the World Health Organization (Geneva), 58(1), 1980, 141-157. Engl. 34 refs.

The incidence of paralytic poliomyelitis in various developing countries is discussed and presented as statistical

data. Epidemiological and other problems influencing the effectiveness of vaccination with oral polio virus vaccine are examined. Current mass vaccination programmes are reviewed and a seven-step procedure for eliminating poliomyelitis from developing countries is proposed. Anti-epidemic measures are also suggested. Finally, the occurrence of occasional paralytic illness in well-vaccinated children is considered. (DP-E)

10011 **Sanjur, D.** *Parámetros ambientales y socioculturales que afectan la alimentoción en los paises del Tercer Mundo. (Sociocultural and environmental parameters influencing diet in Third World countries).* Archivos Latinoamericanos de Nutrición (Caracas), 30(4), Dec 1980, 634-655. Span. 19 refs.

This paper summons data from numerous studies to support the thesis that income constraints and food availability are not the sole determinants of malnutrition in Latin America. Two conceptual models for interpreting the phenomenon of malnutrition — the ecological/familial model and the epidemiological model — are presented and the various environmental, social, and cultural parameters that they encompass are discussed separately. Special attention is paid to the impact on nutrition status of social status, rural/urban migration, and popular beliefs regarding diet. An understanding of the local ecology of malnutrition, based on careful fieldwork, is deemed essential to the implementation of appropriate nutrition programmes. (HC-L)

10012 **Sansarricq, H.** *Problèmes rencontrés dans l'élaboration du protocole d'un essai de vaccin contre la lèpre. (Problems in designing a protocol for a leprosy vaccine trial).* Revue d'Epidémiologie et de Santé Publique (Paris), 29(3), 1981, 305-314. Fren. 18 refs.

The author looks at some of the problems in designing procedures for field trials of an experimental leprosy vaccine. Among the points identified for consideration are the following: the need to include all age groups and involve a large population over a 10-year observation period; the need to plan several trials (in Asia, Africa and Latin America) due to the uneven distribution and unknown epidemiological factors of the disease; the need for basing on individuals the random sampling for allocation to vaccinated and control groups; the importance of minimizing over- and under-diagnosis, due to lack of objective criteria for leprosy diagnosis; and the planning of special groups to undertake possible investigations into effects of immunological tests on the results of the trial. (Modified journal abstract)

10013 **Sattar, S.A., Ramia, S.** *Water-borne transmission of viral infections. implications for the developing world.* Journal of the Pakistan Medical Association (Karachi), 31(8), Aug 1981, 181-185. Engl. Refs.

To date, nearly 700 different kinds of viruses have been isolated from human beings, collectively producing over 50 different types of disease symptoms and responsible for more than 60% of the cases of infectious disease in man. This review summarizes the available information on the role of potable and recreational waters in the transmission of enteric viral infections of man. Included in the discussion are hepatitis A, adenoviruses, enteroviruses, viruses causing acute gastroenteritis and other enteric viruses, e.g. reo-, astro-, calici- and coronaviruses. A number of possible reasons for the lack of direct evidence for the role of potable and recreational waters in virus transmission are presented. The paper contains a copious bibliography listing reports and studies from both developed and developing countries. (EB)

10014 **Schiller, E.J.** *Health, water, and sanitation in Africa.* In Ray, I., Shinnie, P., Williams, D., eds., Into the 80s; the Proceedings of the 11th Annual Conference of the Canadian Association of African Studies, Vol. 2, Vancouver, Tantalus Research, B.C. Geographical Series, No. 32, 1981, p.208-223. Engl. 83 refs.
Eleventh Annual Conference of the Canadian Association of African Studies, Calgary, Alta., 11-14 May 1981.

This paper deals with water usage and waste disposal as they affect the health of the African people. It covers information sources; analyzes current health issues such as epidemiological studies, classification of water-related diseases, the quantity of water required for good health, preventive health education, and research; and considers engineering applications related to water supply and sanitation, including chemical control versus public health engineering, sanitation versus immunization, disease and man-made lakes, renewable energy technologies, and low-cost sanitation options. A copious bibliography is included. (DP-E)

10015 **Singh, M., Arya, L.S., Aram, G.N., Fazal, M.I., Qureshi, M.A.** *Kala-azar in Afghanistan.* Journal of Tropical Medicine and Hygiene (London), 85(5), Oct 1982, 201-204. Engl.

The first three cases of *kala-azar* from Afghanistan are reported. Two girls (aged 4 and 5 years) and a 5-year-old boy reported from Kabul and Badghis province with classical features of visceral leishmaniasis. The diagnosis was based on the demonstration of amastigotes in the bone marrow. (Modified journal abstract)

10016 **Srivastava, J.R.** *Improving the nutrition of the child; with particular reference to developing countries.* Paediatrician (Basle, Switzerland), 11(1/2), 1982, 99-109. Engl. 14 refs.

The author looks at some general statistics of developing countries regarding nutritional diseases of children and considers the magnitude and diversity of problems to be tackled. The following elements should be included in programmes for improvement of child nutrition: feeding as part of package services, knowledge of nutritional needs, understanding significance of nutritional vulnerability, knowledge of characteristics of nutritional problems, and knowledge of dietary habits. Improving nutrition at the local level (involving the family), improve-

ment at the community level (involving clinics and health education personnel), and improvement at the national level (consisting of overall socio-economic and health development) are briefly discussed. The appendices include general information on India's Applied Nutrition Programme, supplementary foods for children, the Integrated Child Development Scheme, and the National Therapy Centre. (EB)

10017 **Taylor, A.E., Muller, R.** *Vaccines against parasites.* Oxford, Blackwell Scientific Publications, Symposia of the British Society for Parasitology, Vol. 18, 1980. 162p. Engl. Refs.
Eighteenth Symposium of the British Society for Parasitology, London, UK, 26 Oct 1979.
The production of vaccines against the organisms causing parasitic diseases was the focus of this symposium, whose papers are presented here. Although complete sterile immunity to parasites has seldom been achieved, cooperation betweeen parasitologists and immunologists has led to some success in vaccinating with irradiated or attenuated strains at critical stages of the life cycle and in maintaining a non-sterile immunity to prevent clinical infection; the general feeling of the participants was therefore one of optimism. Specific subjects covered include malaria, prioplasms, coccidia, trypanosomes, cestodes, trematodes, and bovine lungworm. There are author and subject indices. (RMB)

10018 **Tekle, A.** *Six 'big' diseases: the special programme for research and training in tropical diseases.* In Ray, I., Shinnie, P., Williams, D., eds., Into the 80s; the Proceedings of the 11th Annual Conference of the Canadian Association of African Studies, Vol. 2, Vancouver, Tantalus Research, B.C. Geographical Series, No. 32, 1981, p.224-234. Engl. 16 refs.
Eleventh Annual Conference of the Canadian Association of African Studies, Calgary, Alta., 11-14 May 1981.
The UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Disease is attempting to develop new and better methods for controlling six diseases: malaria, schistosomiasis, trypanosomiasis, onchocerciasis, leishmaniasis, and leprosy. This article briefly examines the epidemiology of these diseases in Africa and the steps taken by the Programme to control them. (DP-E)

10019 **Thomson, J.** *Water supply and sanitation and diarrheal disease control in the Comprehensive Health Improvement Project — Province Specific (CHIPPS) in Indonesia.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report, No. 42, Apr 1982. 37p. Engl.
This report describes the efforts of the Comprehensive Health Improvement Project to assist in the improvement of health services, particularly those involving diarrheal disease control, in the Aceh province of Indonesia. A review of current disease control activities indicates a need for increased community participation, the extension of oral rehydration therapy, greater emphasis on waste disposal, and a survey of water supply and use; recommendations are made concerning all these areas. Appendices contain an order of technical direction, the mission's itinerary, and a list of persons contacted. (DP-E)

10020 **Thylefors, B.** *Avoidable blindness.* World Health (Geneva), Jan 1983, 2-3. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.
About 75% of the almost 20 million cases of blindness found in developing countries are either preventable or curable; prevention is far less costly than the economic burden that blindness causes. The key to prevention and cure lies in a primary health care approach; the most effective action can be taken by health workers and the community itself. Even the provision of simple treatment is feasible but this must be complemented by the availability of more complex treatment. Research is needed into the prevention of cataracts, the chemotherapy of river blindness, the development of a vaccine against trachoma, and the prevention of various age-related eye diseases. (DP-E)

10021 **Turner, G.S.** *Brief review of diagnosis, management and immunotherapy of rabies.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 204-207. Engl. Refs.
Analysis of the available data on rabies epidemiology in developing countries reveals that 90% of human rabies exposure is due to dogs, that male children are the most frequent victims, and that the lower socioeconomic groups are generally unaware of the seriousness of the disease. This article discusses the clinical and laboratory diagnosis of rabies and its treatment under conditions of limited resources. Because of the high mortality, the possibility of vaccination against rabies is also examined, although controlling the disease in the animal population is still recommended as the best form of prevention. (DP-E)

10022 **Udani, P.M.** *Commentary on the BCG vaccination policy in India.* Indian Journal of Pediatrics (Calcutta, India), 48(303), Jul-Aug 1981, 407-412. Engl. 46 refs.
After examining the epidemiology and morbidity of tuberculosis among children in India, the author discusses the advantages of the present programme of direct BCG vaccination and suggests that more community health workers be trained to administer these vaccinations in rural areas, where coverage is less than 10%. The suggested age for vaccination is 3-6 months and, for revaccination, 2 years in endemic areas and by age 5 years elsewhere. It is emphasized that BCG vaccination should not be considered in isolation as a means of tuberculosis control but should always form part of a comprehensive control programme. (DP-E)

10023 **United Nations University, Tokyo.** *Protein-energy requirements under conditions prevailing in developing countries; current knowledge and research needs.* Tokyo, United Nations University, 1979. 73p. Engl. 113 refs.
Working Group on Protein-Energy Requirements under Conditions Prevailing in Developing Countries, San José, Costa Rica, 1-3 Feb 1977.
This paper considers the protein and energy requirements of, and allowances for, individuals and population groups in developing countries where acute and chronic infections are endemic and where the patterns of living differ substantially from those of industrialized nations. Specific topics covered include protein and energy requirements for body maintenance and healthy organ function, the nutritional consequences of infections, nutrient requirements for catch-up growth and tissue repletion, and research considerations. The appendix contains standardized criteria for comparative studies and a look at diets based on traditional social practices. (DP-E)

10024 **Vittachi, A.** *Stop the babymilk pushers.* New Internationalist (Toronto, Ont.), Apr 1982, 7-9. Engl.
Producers of infant formulae admit that mothers should breast-feed but nevertheless continue to promote their products. The author relates how these producers have slowly and begrudgingly accepted the guidelines established by the World Health Assembly in 1981 but implement these guidelines on their own terms; special reference is made to Nestlé. The advantages of breast milk over bottle milk in terms of direct and indirect (i.e., disease prevention) costs are reviewed and a plea is made to support breast-feeding. (DP-E)

10025 **Vittachi, N., Clark, J.** *Out of the fryingpan.* New Internationalist (Toronto, Ont.), Feb 1982, 21. Engl.
This article deplores the advertising campaign using pictures of healthy infants, feeding schedules, letters to doctors, and other misleading information to promote as infant foods such totally unsuitable products as sweetened condensed milk (Malaysia and Hong Kong), custard powder (Nigeria), and Carnation evaporated milk (Mexico). (DP-E)

10026 **Voller, A., De Savigny, D.** *Diagnostic serology of tropical parasitic diseases.* Journal of Immunological Methods (Amsterdam), 46(1), 1981, 1-29. Engl. Refs.
After describing the application of serology in tropical environments, the authors discuss various types of parasite immunodiagnostic antigens (whole and extracted, secretory, and surface). A number of serological techniques are examined, including antibody assays (the complement fixation test, precipitin and agglutinin methods, and labelled reagent methods) and antigen assays. The validation of these methods is considered and their application in trypanosomiasis, leishmaniasis, amoebiasis, malaria, schistosomiasis, hydatid disease, filariasis, and onchocerciasis is briefly outlined. (DP-E)

10027 **Wangspa, S., Limpaphayom, P.** *Blindness in Thailand.* Revue Internationale du Trachome et de Pathologie Oculaire Tropicale et Subtropicale (Annonay, France), 57(4), 1980, 39-53. Engl.
Blindness constitutes one of Thailand's principal social and economic problems. Among the non-infectious aetiologies of blindness, exanopsic amblyopia, ocular traumatisms, cataracts (45% of the elderly), glaucoma, and diabetic retinopathy are the most prevalent. As for infectious causes, trachoma and its complications are now decreasing; leprosy, however, still remains an important cause of blindness, while diabetic retinopathy, degenerative ocular disorders, and ocular traumatology constitute the problems of the future. Serious efforts are now being made to provide health education and to improve social and economic living conditions. (Modified journal abstract)

10028 **Ward, N.A.** *Poliomyelitis: a review.* Tropical Doctor (London), 13(1), Jan 1983, 21-28. Engl.
In most tropical countries, poliomyelitis is a widespread endemic disease, usually crippling from 3-10:1 000 children, with acute attacks occurring in small outbreaks and affecting mostly children aged less than 3 years. There were approximately 42 000 cases reported worldwide during 1980. This article reviews polio in its epidemiological and clinical aspects and considers the factors affecting immunization. Some advantages and disadvantages of the two types of vaccines, the inactivated injected vaccine and the live-attenuated oral vaccine, are discussed. Statistical data, two graphs, and a distribution map are included. (EB)

10029 **Weekly Epidemiological Record, Geneva.** *Expanded programme on immunization; Global Advisory Group meeting/Programme élargi de vaccination; Réunion du Groupe consultatif mondial.* Weekly Epidemiological Record (Geneva), 56(2), 16 Jan 1981, 9-15. Engl., Fren.
Third Meeting of the Expanded Programme on Immunization Global Advisory Group, Geneva, Switzerland, 20-23 Oct 1980.
This report summarizes the recommendations and conclusions reached by the Expanded Programme on Immunization (EPI) Global Advisory Group at their 3rd meeting in October 1980. The objectives of the EPI are to provide immunization for all children by 1990 and to develop immunization services in association with other health services, particularly those directed at mothers and children. The Global Advisory Group recommends that each country should establish realistic targets and see that adequate resources are available at each stage of the programme. Specific recommendations are made with respect to various illnesses and problems in quality control and the stability of vaccines are considered. Data on current progress of the EPI are provided in five tables. (Modified journal abstract)

10030 **Weil, C.** *Health problems associated with agricultural colonization in Latin America.* Social

Science and Medicine (Aberdeen, UK), 15D(4), Nov 1981, 449-461. Engl. 91 refs.

Disease hazards help to explain why much of Latin America's humid tropics remains sparsely inhabited. Recent agricultural colonization has been partially fostered by amelioration of some of the former threats, but landscape modification by colonists has also created new disease hazards. The continual arrival of settlers and the periodic nature of migration to these areas provide ideal conditions for the introduction and re-introduction of infectious diseases. Migration itself produces stress that may contribute to health problems; migrants may not be biologically suited to their new environs and cultural practices are not always transferrable. Finally, health care delivery in such remote areas is difficult and expensive. (Modified journal abstract)

10031 **Wernsdorfer, W.H.** *Prospects for the development of malaria vaccines.* Bulletin of the World Health Organization (Geneva), 59(3), 1981, 335-341. Engl.

Also published in French.

After examining the rationale for malaria immunization, the author discusses historical and more recent approaches to vaccination against this disease. Suggestions are made for testing malaria vaccines once they have been developed, with the warning that vaccination should not be viewed as the only form of malaria control. (DP-E)

10032 **WHO, Geneva.** *Progress in immunization programmes in the eastern Mediterranean region.* WHO Chronicle (Geneva), 35(5), 1981, 179-181. Engl.

Also published in French, Russian, and Spanish.

The Who Expanded Programme on Immunization (EPI) was launched in the Eastern Mediterranean region with a seminar in Damascus in September 1975. Over the next 2 years, many countries began to intensify their existing national programmes and to plan in a systematic way for nationwide coverage. Since the 1977 seminar in Alexandria, there has been a steady increase in the number of countries cooperating in the programme and coverage evaluations and programme reviews have made it possible to monitor the programme regionally. This paper presents data on immunization performance and reported incidence of target diseases for the region as a whole during 1974-1979 and points out the programme's future directions. (HC-L)

10033 **WHO, Geneva.** *Resistance of vectors of disease to pesticides; fifth report of the WHO Expert Committee on Vector Biology and Control.* Geneva, WHO, Technical Report Series, No. 655, 1980. 82p. Engl.

WHO Expert Committee on Vector Biology and Control, Geneva, Switzerland, 3-9 Jun 1980.

For many years, WHO has been monitoring the spread of vector resistance to pesticides, using standard methods of measuring the susceptibility of vector species. This report contains the most up-to-date information available on this problem. It examines the impact of resistance on the control of arthropod vectors and reservoirs and intermediate hosts of disease, listing, in a series of annexes, the species that are now resistant to DDT, dieldrin/HCH, organophosphates, and other insecticides, along with the countries and areas in which this phenomenon has come to light. Special attention is paid to malaria vectors. Research trends are also discussed. (Modified journal abstract)

10034 **WHO, Geneva.** *Diarrhées à rotavirus et autres diarrhées virales. (Diarrhea due to rotavirus and other viruses).* Bulletin de l'Organisation Mondiale de la Santé (Génève), 58(4), 1980, 539-557. Fren. Refs.

Recent observations have shown that virus infection is a significant cause of diarrhea in infants and young children in both developed and developing countries. This article reviews available information on the epidemiology, clinical picture, and laboratory diagnosis of acute diarrhea due to two recently identified causal agents, i.e., rotaviruses and Norwalk viruses (and Norwalk-like agents) as well as other forms of viral diarrhea. Priorities for furthur research into the epidemiology, pathophysiology, and preventive measures are recommended. Foremost among these priorities is the development of a vaccine against rotaviruses that can be administered to humans. (Modified journal abstract)

10035 **WHO, Geneva.** *Cholera and other vibrio-associated diarrhoeas.* Bulletin of the World Health Organization (Geneva), 58(3), 1980, 353-374. Engl.

In recent years, there have been major advances in knowledge of *Vibrio* species and related organisms that are responsible for diarrheal diseases, particularly *V. cholerae* O-Group 1 (epidemic strains), atypical *V. cholerae* O-Group 1, non-O-Group 1 *V. cholerae* (non-epidemic strains), *V. parahaemolyticus*, *V. alginolyticus*, and "Group F vibrios". This article reviews new information and suggests priorities for research in areas such as the epidemiology and bacteriology of vibrios, environmental surveillance for *V. cholerae* O-Group 1, phage and vibriocin typing of *V. cholerae*, and cholerae enterotoxin, and its relevance to pathogenesis, immunity, and vaccine development. (Modified journal abstract)

10036 **WHO, Geneva.** *WHO expert committee on malaria; seventeenth report.* Geneva, WHO, Technical Report Series, No. 640, 1979. 71p. Engl. 91 refs.

WHO Expert Committee on Malaria, Geneva, Switzerland, 20 Feb-1 Mar 1979.

This report examines various approaches to malaria control, including: malaria situation analysis; the implementation of the revised antimalarial strategy; the definition, objectives, and planning of a control programme; and programme implementation and evaluation. The forecasting, prevention, and control of epidemics is discussed, with a brief review of training. Other sections cover research, programme coordination, international

surveillance, areas for registration of malaria eradication, recommendations, etc. (DP-E)

10037 Willcox, R.R. *Traitement de la syphilis. (Syphilis treatment).* Bulletin de l'Organisation Mondiale de la Santé (Génève), 60(1), 1982, 25-34. Fren.
Also published in English in Bulletin of the World Health Organization, 59, 1981, 655-663.
This paper outlines some of the recommendations on the treatment of syphilis made by the WHO Scientific Group on Treponemal Infections, which met in October 1980. The following areas are covered: (1) treatment of early syphilis with penicillin and alternative antibiotics, recommended dosages, follow-up examinations, and treatment of contacts; (2) treatment of late acquired syphilis, concepts of cure, results of therapy in latent, benign, cardiovascular, and neurosyphilis, recommended schedules of treatment; (3) treatment and management of prenatal and congenital syphilis: and (4) general reactions to penicillin treatment. (EB)

10038 Williams, J.E., Hudson, B.W., Turner, R.W., Sulianti Saroso, J., Cavanaugh, D.C. *Plague in central Java, Indonesia.* Bulletin of the World Health Organization (Geneva), 58(3), 1980, 459-468. Engl. 40 refs.
The epidemiology of human plague in central Java, Indonesia, is traced from 1968. Since that time, the incidence of both rodent and human plague has been greatest from December-May at elevations over 1 000 m, where isolations of *Yersinia pestis* have been obtained from rats and fleas. Surveillance efforts are advocated and statistical data included. (DP-E)

10039 Winarno, F.G., Karyadi, H., Karyadi, D. *Indigenous food mixtures for vulnerable groups in Indonesia.* Bogor, Indonesia, Bogor Agricultural University, 1975. 15p. Engl. 14 refs.
A number of food mixtures that have been developed by the Nutrition Research Institute in Bogor, Indonesia, and the nutrient content of these mixtures are described. In looking at various factors that influence the development of foods for infants and children and the improvement of mothers' nutrition, the authors consider the following: (1) availability of raw materials and trained manpower for production, (2) consumer acceptance, (3) suitable safeguards and methods of food preservation, (4) acceptability to local tastes of methods of preparation, and (5) the local development and design of equipment. The need is expressed for more research and government assistance in the development of new indigenous food mixtures. Four tables of data are included. (EB)

10040 York, P., Matera, N.L. *Patient medication compliance in a developing country.* Journal of Clinical and Hospital Pharmacy (Oxford, UK), 5(4), 1980, 307-310. Engl.
A study of patient medication compliance in Tanzania revealed that only 20.6% and 18.4% of the patients at a hospital outpatient clinic and a rural health centre took their medicine in the prescribed manner. Because literacy and the number of individual medicines prescibed appeared to be important factors in failure to take drugs properly, the following suggestions are made: that practitioners make an effort to prescribe fewer medicines; that pharmacy personnel provide patients with correctly dispensed, packaged, and labelled medicines and, above all, explicit verbal instructions; and that pictoral labels for illiterate patients, two examples of which are shown, be more widely adopted. (HC-L)

10041 Zhou, Z.J. *Malaria situation in the People's Republic of China.* Bulletin of the World Health Organization (Geneva), 59(6), 1981, 931-936. Engl.
Also published in French and Russian.
This paper describes the epidemiology of malaria in the People's Republic of China, pointing out the different features of the disease in four broad zones and the corresponding control strategies. Although the prevalence of the disease has been reduced from some 30 million cases annually during the 1940s to just over 2 million in 1979 and 64% of the population now lives in areas where the incidence is less than 5:10 000, some major technical problems pose obstacles to the eradication of malaria. These include difficulty in controlling certain vectors because of their exophilic habits or forest habitat, the lack of a simple and satisfactory method for the medical treatment of *Plasmodium vivax* malaria, the impossibility of tracing people infected with long-incubation vivax malaria between transmission seasons, and the spread of chloroquine-resistant strains of *P. falciparum* in some areas. (HC-L)

10042 Zourbas, J. *Vaccination contre la rougeole; mise au point pratique, aspects économiques. (Measles vaccination; practical outline of economic aspects).* Revue de Médecine Thérapeutique (Paris), 22(39/40), 23-30 Nov 1981, 2485-2492. Fren. 15 refs.
A summary of the history of measles vaccination with live attentuated vaccines in the USA (since 1963) and France (since 1969) is followed by a discussion of the types of vaccines available, their indications, and possible side effects. Systematic vaccination is recommended for children aged more than 15 months, while emergency vaccination in periods of epidemics may be administered to infants as young as 9 months. The counterindications are described and 7 tables and graphs used in the discussion of the cost-benefit analysis and the decline in morbidity due to measles. (EB)

III Health Care Implementation

III.1 Inpatient Care

See also: 09832, 09909, 10054, 10063.

10043 **Adi, R.** *Aged in the homes for the aged in Jakarta — a case study.* Jakarta, Atma Jaya Research Centre, 1982. 35p. Engl.
Asian Regional Conference on Active Aging, Manila, Philippines, 24-28 Jan 1982.
This conference paper describes the results of a study undertaken to investigate the plight of aged persons living in institutions (homes for the aged) in Indonesia. The following areas are examined: living conditions in these homes, characteristics and diseases of the residents, socioeconomic factors that led the elderly to stay there, and the attitudes of Indonesians regarding their moral duty to care for their aged relatives in their own homes. Thirteen tables of data are included in the discussion. (EB)

10044 **Adler, J., Bodner, E., Bornstein, S., Goldfarb, J., Engelhard, D.** *Medical mission to a refugee camp in Thailand.* Disasters (London), 5(1), 1981, 23-31. Engl. 8 refs.
The experiences of an Israeli medical team (5 physicians, 4 medics) forming part of an international mission to provide health services to Kampuchean refugees in a Thai camp for 6 months in 1979-1980 are reviewed. The available facilities, equipment, drugs, and health personnel are described and the daily routine is outlined. The most common diseases seen were malnutrition, malaria, and respiratory and other infections. During this period, 31 000 refugees received simple, effective medical care in a field hospital where more than 1 000 patients were hospitalized at any given time. Statistical data are included. (DP-E)

10045 **Bauer, H.** *Eindrücke vom Gesundheitswesen in Südwest- und Südafrika. (Impressions of health services in Southwest and South Africa).* Medizinische Welt (Munich, Germany FR), 33(11), 19 Mar 1982, 418. German.
The author describes his impressions gathered during two study tours of medical facilities in Namibia and South Africa. The recently completed Windhoek State Hospital (Namibia), where a large number of advanced cases of genital carcinoma was observed, has well-equipped intensive care facilities, a modern maternity clinic, and a midwife training school. The modern 1689-bed Tygerberg Hospital in Cape Town provides birth control and family planning instructions to both white and coloured women. The university in Durban has a medical school offering courses to coloured students and clinics of various specialists (2 100 beds). The hospital at Baragwanath near Johannesberg (2 494 beds and 19 operation theaters) performs about 24 000 deliveries annually. The South African government spends approximately 765 million Rand yearly in health services; persons with low incomes receive free medical care. The author expresses the opinion that South African medical standards appear comparable to those of European countries. (EB)

10046 **Hôpital de Kangu-Mayumbe, Kangu-Mayumbe, Zaire.** *Rapport d'activité, 1979. (Activity report, 1979).* Kangu-Mayumbe, Zaïre, Hôpital de Kangu-Mayumbe, 1979. 20p. Fren.
See also entry 2331 (volume 4).
The annual report of the Kangu-Mayumbe Hospital (488 beds) lists the number of hospital staff for 1978 and 1979, compares the number of interventions under each type of service for 1978 and 1979, and sets down the numbers of cases and deaths due to 19 categories of disease. It then discusses changes in the disease pattern and delivery of services since the last annual report, with particular attention to the supervision of delivery of services to a rural zone of 60 000 population and provision of rural experience for medical students from the national university. (HC-L)

10047 **Leke, J.T.** *Problem of the availability of drugs in hospital: the example of Makurdi, Nigeria.* International Nursing Review (Basle, Switzerland), 29(2), Mar-Apr 1982, 46-47. Engl.
After newspaper allegations of drug pilferage at Makurdi General Hospital, Nigeria, a study was carried out to determine the availability of drugs, to measure the proportion of drugs out of stock compared to those available, and to establish, if possible, a correlation between shortages and days of the week. The results are presented in chart form. Although there were no evident patterns in terms of days of the week, drug shortages were acute. Recommendations aimed at alleviating them include allocating more money for drug purchases, establishing pharmacies in government hospitals, and carrying out further studies. (DP-E)

10048 **Lennox, C.E., Kia, J.** *Survey and anaesthesia at Enga provincial hospital.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 100-103. Engl.

This paper is an analysis of all surgical operations performed and anaesthetic given by general medical officers at the isolated Enga Provincial Hospital in Wapenamanda, Papua New Guinea, from January 1977-March 1981. A total of 1 352 operations (266 major, 731 minor, and 395 obstetric and gynaecological) were performed. Enteritis necroticans, penetrating abdominal wound, and peritonitis were the main reasons for the 112 laparotomies, while ketamine (42.9%), local (32.1%), and spinal (18.6%) anaesthesias were the main types used on 1 638 patients. Minimum essential skills for general medical officers (without specialists) include ability to perform laparotomies and caesarian sections, administer spinal anaesthetic, and be competent in use of ketamine. (EB)

10049 **Nightingale, K.W.** *Anaesthetics in the districts of Kenya.* Tropical Doctor (London), 12(1), Oct 1982, 167-171. Engl.

A survey of the anaesthetic services in 22 Kenyan hospitals outside of Nairobi assessed staff and workload, working conditions, equipment, supplies, and techniques. The survey findings are discussed with emphasis on some of the problems encountered. A list of 14 recommendations for improving these services is presented. (DP-E)

10050 **Nightingale, K.W.** *Environmental pollution by anaesthetic agents: a consideration for developing countries.* Tropical Doctor (London), 12(1), Jan 1982, 2-7. Engl. 75 refs.

This paper reviews the literature on the possible adverse effects on operating theatre staff of pollution of the atmosphere by volatile anaesthetic agents. Although none of the evidence of harmful effects could be called conclusive, it is suggested that there are compelling reasons for reducing pollution to a minimum (e.g. possible teratogenicity of anaesthetic agents). Since, however, developing countries may be unwilling to expend scarce resources on expensive mechanical scavenging systems, a number of simpler means by which the anaesthetist can reduce pollution are put forward. (HC-L)

10051 **Rhoads, E.C., Holmes, L.D.** *Mapuifagalele, Western Samoa's home for the aged — a cultural enigma.* International Journal of Aging and Human Development (Farmingdale, N.Y.), 13(2), 1981, 121-135. Engl.

Mapuifagalele is Polynesia's first home for the aged, and why it exists at all is something of a mystery. Although Samoan families emphatically insist that they can and do provide for their own aged (and in fact suffer loss of face if they do not), this institution is full to overflowing and there is a waiting list. This article discusses the origin and function of this residence for the aged and explores the changing lifestyle, economic patterns, and world view that make its existence possible and even necessary. (Modified journal abstract)

10052 **van Coeverden de Groot, H.A., Davey, D.A., Howland, R.C.** *Peninsula maternity and neonatal services; an urban community perinatal programme.* South African Medical Journal (Cape Town), 61(2), Jan 1982, 35-36. Engl. 4 refs.

This article reviews the 1st year (1980) of the Peninsula Maternity and Neonatal Service (PMNS), comprising five maternity hospitals and three midwife obstetric units (MOUs) in the Cape Peninsula, South Africa. The administration of the PMNS and the function, workload, advantages, and continuing education programme of the MOU are discussed. Essentially an urban community perinatal programme that also emphasizes family planning, the PMNS carried out 20 694 deliveries in 1980, with an ethnic distribution of 27% black, 69% coloured, and 4% white, and an overall perinatal mortality rate of 29.2:1 000 births. A brief outline of research opportunities and main problems in the service is given. (RMB)

III.2 Outpatient Care

See also: 09909, 10089, 10219, 10242.

10053 **Ben-Tovim, D.** *Community-based care.* World Health (Geneva), Oct 1982, 12-15. Engl.

In 1977, Botswana initiated an innovative mental health service based on the country's eight available psychiatric nurses, who were transferred from the one mental hospital to strategically-located hospitals and health centres nation-wide. In addition to providing outpatient and referral services, nurses visit homes and health facilities within their catchment areas. The types of activities carried out during such a visit are described. Councils of village elders are often enlisted to provide support for reintegrating patients into normal life. Government commitment and the strength of the extended family system have also contributed to the success of the service, although many problems still remain. (DP-E)

10054 **Calderón, C.** *Mexico's San Rafael community mental health center: six years of progress.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(1), 1982, 17-27. Engl.

In 1974, Mexico undertook in the Tlalpan subdistrict a substantial pilot mental health programme that aimed to incorporate mental health activities into public health by establishing appropriate coordination between academic institutions, government agencies, and private organizations. Operating out of the 200-bed San Rafael clinic, supervised students of medicine, nursing, psychology, and social work have conducted eight community health projects directed at primary prevention of mental health problems. Clinic staff also provided 17 000 free psychiatric consultations from 1975-1980, initiated a 2-year training course in psychotherapy during which more than 5 500 low-cost treatments were given, and

participated in a WHO-sponsored study of alcoholism. The clinic's activities are described in some detail. (DP-E)

10055 **Gibbs, D.L., Johnson, W.D., Jones, T.C., Baptista, A.G.** *Cornell-Bahia program, 1975-1978: development of a tropical communicable diseases laboratory centre.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 346-353. Engl. 17 refs.
Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana*, 92(3), 1982.

In 1975, Cornell University Medical College (USA), the Federal University of Bahia, and the state of Bahia (Brazil) undertook a cooperative international programme to develop a centre for the study and control of communicable diseases in northeastern Brazil. The impact of this programme may not be fully known for many years. However, it has succeeded in upgrading laboratory services and providing reliable laboratory support for Bahia; as a result, the quality of health care has improved. The programme has also trained over 300 health workers and the laboratory centre is becoming an important research centre. Statistical data are included. (Modified journal abstract)

10056 **Jancloes, M.F.** *Mass-control of intestinal nematode infections.* Tropical Doctor (London), 12(4), Oct 1982, Part 1, 185-188. Engl. 13 refs.

After discussing the issue of community diagnosis, the author proposes three different schemes of mass treatment for intestinal nematode infections depending on whether their prevalence in the target population does not exceed 25% for any age group, lies between 25%-50%, or exceeds 50% in at least one age group. A sanitation education programme should also be introduced at the same time. Information on the dosages of various drugs used to treat ascariasis, hookworm, strongyloides, trichuris, and enterobius is contained in a convenient table. (DP-E)

10057 **Johnson, D.E., Burke, D.S., Williams, R.G., Murray, B.E.** *Observations on medical care in a refugee camp in Thailand.* Military Medicine (Washington, D.C.), 146(12), Dec 1981, 842-845. Engl.

In October 1979, an influx of 30 000 Khmer refugees into Thailand made US military personnel responsible for the primary care of a large severely-malnourished population. The organization and equipment of the refugee camp and its hospital facilities are described. Although there was a physician:patient ratio of 1:100, nurses, paramedics, and translators were in short supply. Malaria complicated by malnutrition was the most pressing medical problem encountered, while diarrhea, pneumonia, and simple malnutrition were also quite prevalent. The staff's efforts to provide an adequate and culturally acceptable diet are examined in detail. (DP-E)

10058 **Mandara, M.P., Mhalu, F.S.** *Cholera control in an inaccessible district in Tanzania: importance of temporary rural centres.* Medical Journal of Zambia (Lusaka), 15(1), 1980/81, 10-13. Engl. 8 refs.

In 1977, an outbreak of cholera occurred on a delta island (Twasalie), Utete District, Tanzania. Due to poor communications and inadequate health facilities, the disease went uncontrolled for 4 weeks and spread widely, enhanced by local burial customs and poor hygiene. The outbreak was finally checked by establishing 16 cholera centres in the district, each staffed by three auxiliary personnel. The mortality at these centres was 1.6%, compared to 55% before the institution of control measures and 1.4% at the national teaching hospital. This paper describes the epidemiology and control of the outbreak with emphasis on the role of local customs, personal hygiene, and environmental sanitation. (HC-L)

10059 **Mogli, G.D.** *Medical records in leprosy programme.* Leprosy in India (New Delhi), 51(2), Apr 1979, 239-242. Engl.

After reviewing the purpose and definition of medical records, the author lists the type of information they should contain. These points must be considered in maintaining a records system for hospital outpatients: the establishment of aims and objectives, the scope of the services, the medical and secondary records, controls, statistics, and administration. These considerations are briefly applied to the keeping of leprosy records. (DP-E)

10060 **Rahamathullah, V.** *Comprehensive labour welfare scheme in south Indian plantations.* Tropical Doctor (London), 12(2), Apr 1982, 71-72. Engl.

In 1971, the United Planter's Association of Southern India initiated a Comprehensive Labour Welfare Scheme comprising nine components: care and training of the young, nutrition support, social education, population dynamics, environmental and personal hygiene, craft training, planning of leisure, preventive medicine, and family planning. The efforts made to implement these services are briefly described. It was found that the most effective way of providing services was through the "link worker," a locally-trained community health worker who assumes responsibility for up to 20 neighbouring families. (DP-E)

10061 **Shaffer, R.** *Beyond the dispensary (on giving community balance to primary health care).* Nairobi, African Medical and Research Foundation, Community Health Worker Support Unit, 1984. 90p. Engl.

Primary health care (PHC), the major subject of discussion at the 1978 WHO Alma-Ata Conference, must bring health care as close as possible to where people live and work, making health care universally accessible to all individuals. The present publication considers the ramifications of the PHC approach as it occurs "beyond the dispensary", as a community-based health care (CBHC) development. The CBHC approach strives for more delegation of responsibility for health promotion,

better balance between cure and prevention, more input into the system from volunteers, increased awareness, and improved cross-disciplinary integration. The training of community health workers (CHWs), the training of trainers, the evaluation of the CBHC programme, uncertainties surrounding the CBHC programme, and the implications for the medical establishment of this "beyond the dispensary" CBHC are discussed. The 50-page illustrated appendix includes sample pages and questionnaires from CHW manuals. (EB)

10062 **Sharp, P.T.** *"Pierced by the arrows of this ghostly world" — a review of arrow wounds in Enga province.* Papua New Guinea Medical Journal (Port Moresby), 24(3), Sep 1981, 150-163. Engl. 10 refs.

War injuries, especially arrow wounds, are a fact of life among the Enga people of the highlands of Papua New Guinea and health workers must be able to deal with them if the credibility of the health services is to be maintained. This paper describes the pattern of arrow injuries observed at the Laiagam rural health centre from 1976-1980 — during which time arrow wounds accounted for 8% of all surgical interventions — and how they were managed. It also provides considerable background information on the way of life that gave rise to them. (HC-L)

10063 **Wallace, C.E., Marshall, F.N., Robinson, C.** *Retrospective review of maternal and child health services at the Albert Schweitzer Hospital in rural Haiti.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(1), 1982, 7-16. Engl.

Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana*, 92(5), 1982.

The Albert Schweitzer Hospital in Deschapelles, Haiti, has been providing a wide range of maternal and child health services to the people of its rural district for the past 25 years. The general overview of those services contained in this article is expected to provide useful information for health administrators and institutions seeking to extend health care services to rural areas. Specific topics covered include: neonatal tetanus control; surveillance, treatment, and prevention of malnutrition; and a variety of maternal child health services such as school programmes, prenatal and postnatal care, family planning, training of traditional birth attendants and midwifery auxiliaries, a project involving low-birth-weight babies, and dispensaries and health agents. (DP-E)

10064 **Westermeyer, J.** *Treatment for narcotic addiction in a Buddhist monastery.* Journal of Drug Issues (Tallahassee, Fla.), 10(2), Spring 1980, 221-227. Engl. Refs.

From 1972-1974, some 3 000 narcotic addicts from Laos were sent for treatment to a Buddhist monastery in Thailand. This massive effort was initiated by a devout Buddhist woman and funded from a variety of sources. The results from 1 192 patients admitted during 1973 are discussed and presented as statistical data. Addicts who were very unlike the monks did not appreciate the treatment, had poor attendance, and had poor treatment outcomes. Others praised the programme and had successful treatment; even here, however, a high mortality occurred. Attendance at the programme had the characteristics of a fad, with initial enthusiasm and later non-acceptance. (Modified journal abstract)

10065 **Yusof, K.** *Sang-Kancil; primary health-care for urban squatter settlements (a Malaysian experience).* Baroda Journal of Nutrition (Baroda, India), 9, 1982, 242-250. Engl.

After examining living conditions in urban squatter settlements in Malaysia and the health problems of their inhabitants, the author describes Sang-Kancil, an intervention programme begun in January 1978. Its eight aims emphasize maternal child health services, community participation, training of both local volunteers and health personnel, and income generation. Some of the activities to date, principally those involving the establishment of a batik factory, clinics staffed by nurse practitioners, and preschool education, are summarized. (DP-E)

III.3 Mobile Units and Services

10066 **Mandl, A., Radda, T.M.** *Augenkrankheiten und ophthalmologische Versorgung in einem Entwicklungsland; Bericht über ein Eye-Camp in Andhra Pradesh/Indien. (Eye diseases and ophthalmological care in a developing country; study of an eye camp in Andra Pradesh, India).* Klinische Monatsblätter für Augenheilkunde (Stuttgart, Germany FR), 179(6), Dec 1981, 463-464. German. 12 refs.

The authors present statistics on eye diseases and ophthalmological care in India where they worked in an eye-camp in Andra Pradesh. During a 2-day period, 701 patients were examined. Trachoma was found in 98 cases, immature cataracts in 207 cases; 162 patients required treatment for mature cataract, a complication rate of 28% resulting in those operations performed by the expression method. In India the main causes of blindness in children are infection (44%) and vitamin A deficiency (27%). In this country, where approximately 9 million people (1.5%) are blind (compared to 116 400 or 0.2% in the UK), eye camps appear to be a cost-effective vehicule in reaching the masses for treatment. (EB)

10067 **Sanborn, W.R.** *Use in tropical areas of a portable kit for rapid diagnosis of infectious diseases.* Appropriate Technology for Health Newsletter (Geneva), (8), Feb 1981, 54-55. Engl.

In 1979, two missions in Upper Volta used a portable laboratory kit to examine cerebrospinal fluid specimens for specific meningococcal antigens by means of counterimmunoelectrophoresis (CIE) and coagglutination (COAG) tests, enabling health workers to diagnose and

treat local cases of meningitis. Applications of these two tests are presented in chart form. Other instances of the successful use of the laboratory kit are briefly described. (DP-E)

III.4 Health Education

See also: 09824, 09897, 10126, 10138, 10167, 10187, 10200, 10202, 10212.

10068 **Alfiler, M.** *Development theatre: drama as agent of change.* Initiatives in Population (Manila), 5(1/2), 1982, 20-26. Engl.

Development theatre is defined as the use of drama to communicate ideas about development. This paper traces the history of development theatre in the Philippines; summarizes the principal characteristics of some 26 development theatre groups as revealed in a survey by the Population Centre Foundation (PCF) in 1979; and gives a more detailed account of two such groups. The PCF believes that development theatre has great potential for reaching and motivating audiences and is working toward its institutionalization by putting development theatre groups in touch with potential sources of funding (development agencies, educational institutions, socio economic institutions, etc.) and with each other. (HC-L)

10069 **Aloysius, C.** *Dear home doctor, help me please.* UNICEF News (New York), 114(4), 1982, 20-22. Engl.

On tea plantations and in other rural areas of Sri Lanka, a new radio programme in Tamil is becoming one of the most listened-to shows on the air. Called *Suha Valvu* ("comfortable healthy living"), it features Dr. K. Indra Kumar, a physician who is also an experienced writer and broadcaster. He answers, in simple, understandable language, questions mailed to him by listeners and advises them on subjects ranging from disease control to breast-feeding, always emphasizing solutions that rely on prevention by means of proper hygiene and nutrition. Because it overcomes the problem of widespread rural illiteracy, the popular programme will soon be expanded to include additional material such as dramas and recipes. (DP-E)

10070 **Brieger, W.R., Akpovi, S.U.** *Health education approach to training village health workers in Nigeria.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 3(2), 1982-1983, 145-152. Engl.

Health education plays an important role in the primary health care process, particularly in the training of village health workers. Three educational concepts (training based on community-felt needs, trainee involvement, and social and cultural realism) are essential in designing these programmes. These concepts were applied over a 3-year period in the training of village health caretakers in Idere town of Oyo State, Nigeria. Volunteer village health workers from 10 villages were able to bring about changes in knowledge, behaviour, and health status of their fellow villagers, indicating that the health education approach hastened skill transfer to the communities. (Modified journal abstract)

10071 **Chiapo, G.** *Eau potable: suggestions pour un projet d'education. (Potable water: suggestions for an educational project).* Développement et Santé (Paris), 41, Oct 1982, 24-28. Fren.

It has been the experience of the Health Centre at Guibéroua, Ivory Coast, that injuries and wounds requiring dressings represent 9% of the total visits and take up 50% of the nurses' worktime. The author puts forth suggestions for a project that aims to teach responsible villagers a short basic course on dressing wounds and alerting the public to the importance of hygiene, thereby removing part of the workload from health personnel. The short- and long-term objectives and methodologies are described and the functions of these trained persons as part of a health team are listed. An important responsibility of these members would be to encourage and advise villagers on how to keep all sources of drinking water clean and safe. A list of materials required by these health promoters is provided. (EB)

10072 **da Cunha, G.** *Telling the mothers: "you can breastfeed".* UNICEF News (New York), 114(4), 1982, 15-17. Engl.

In 1979, Brazil launched its national breast-feeding programme with a series of advertisements on radio and television. In addition, some 30 000 health workers were trained in breast-feeding techniques, hospitals were encouraged to allow rooming-in, the subject of breast-feeding was added to school curricula, and efforts were begun to refashion legislation concerning breast-feeding and the working woman. Because the programme's communications component was considered extremely important, special steps, briefly described here, were taken in designing its message. Especially important was the role of the mass media because of the influence they have on people's attitudes. (DP-E)

10073 **Danguilan-Vitug, M.** *Low-cost media: appropriate technology for population communication.* Initiatives in Population (Manila), 5(1/2), 1982, 34-39. Engl.

This paper examines the potential of various low-cost and folk media in the Philippines for transmitting family planning and development messages. The media include flip-charts, comic books, a blackboard newspaper, puppet shows, and drama; some have already been tried with success. Effective utilization of low-cost media, however, demands considerable imagination and resourcefulness on the part of the field workers and it is suggested that this be fostered by interested agencies and organizations through appropriate training seminars, workshops, and other methods of information-sharing. (HC-L)

10074 **Dharmalingam, T., Shanmugan, P.** *Complexities of health education in leprosy.* International Journal of Health Education (Geneva), 24(4), 1981, 176-182. Engl.

After briefly discussing the sociological problems related to leprosy control, the levels of prevention, and the components of health education (the leprosy patient, the community, and the health worker), the authors describe the experience gained in developing health education activities within a leprosy control programme in five rural Indian villages. Health education trainees from the National Leprosy Control Programme spent 4 weeks doing field work in the village to conduct health education activities, detect new cases (38 in 3 days), and encourage treatment compliance. Their efforts are discussed and assessed in considerable detail. It is felt that the results of this study illustrate the importance of involving the community, and not just the individual patient, in health education. (DP-E)

10075 **Eisenberg, C.** *Portrait of a Central American slum.* World Health (Geneva), Oct 1982, 26-29. Engl.
Originally published in World Health Forum (Geneva), 1(1/2), 1980.

An innovative project in Santa Eduviges, Honduras, using mental health expertise, has shown how community self-help can be stimulated so as to produce rapid and significant improvements in self-awareness and community function. Based on data gathered during the 1st phase, the project's 2nd phase consisted of a programme of education and health promotion to raise the community's level of consciousness, while self-help groups were organized during the 3rd. The completion of a number of self-help activities, such as the construction of a reservoir, contributed to the mental health of those involved by eliminating fatalism, despair, and other negative influences. (DP-E)

10076 **Frenk, J.** *De la educación para la salud a la calidad de la vida. (Health education and the quality of life).* Gaceta Médica de México (Mexico City), 116(9), Sep 1980, 384-386. Span.

Despite reductions in morbidity and mortality (brought about largely by improvements in living conditions rather than the activities of health services), developing countries in Latin America are still attempting to use unsuitable, highly technical, Western-style medical care to deal with disease patterns more typical of a pretechnical era. Health education has been heralded as a more appropriate solution to Latin American health problems, although it too has its limitations, which are outlined in this article. The author draws a distinction between "health-promoting education" (*educación hacia la salud*) for individuals, groups of patients, and the community and "health education" (*educación en salud*) for health workers. Ways in which the former can be implemented are briefly discussed. (RMB)

10077 **Gershon, W., Mani, R.S., Roopkumar, K.S.** *Programme of health education among school teachers; a study conducted at Gremaltis.* Leprosy in India (New Delhi), 53(4), Oct 1981, 641-655. Engl.

The organization of a 6-month health education programme designed to make school teachers aware of facts and attitudes about leprosy and sponsored by the Greater Madras Leprosy Treatment and Health Education Scheme (India) is described. Aspects covered include general and specific objectives, target groups, content, and nature. The 1 000 participants' understanding of the disease both before and after the programme is analyzed by means of discussion and statistical data. (DP-E)

10078 **Hilton, D.** *Health education by story telling.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 236-237. Engl.

Village health workers in Lardin Gabas, Nigeria, have helped to reduce the incidence of malaria, diarrhea and related dehydration, kwashiorkor, neonatal tetanus, and tropical ulcers in their patients by telling them appropriate health education stories. All of the stories in this programme are created by people indigenous to the area so that local customs and beliefs can be incorporated. Since their purpose is not to increase knowledge but to encourage healthy living habits, only the desired behavioural change (and not the reasons for it) are included. This teaching method proved so effective that it has been adapted to schools, churches, and radio programmes. (DP-E)

10079 **Hoorweg, J., Niemeijer, R.** *Impact of nutrition education at three health centers in central province, Kenya.* Leiden, Netherlands, African Studies Centre, Research Reports, No. 10, 1980. 65p. Engl. 35 refs.

This report analyzes the effectiveness of nutrition education given at three Kenyan health centres in different ecological zones over the course of several years by nutrition field workers, who were specially-trained maternal child health nurses. Surveys of frequent attenders and control groups revealed that, while the former appeared to be more aware of the need to supplement a young child's diet at an early age, there were no significant differences between them with regard to maternal food preferences, children's food consumption during the previous day, or children's nutritional status. Reasons for this failure are considered and statistical data are included. (DP-E)

10080 **Maglipon, M.A.** *They thought one shot was surely enough.* UNICEF News (New York), 114(4), 1982, 24-25. Engl.

In 1976, when the Philippine government launched the WHO-recommended Expanded Programme of Immunization, a major obstacle proved to be a lack of communication with the target populations, who often followed the advice of village leaders and either did not attend clinics at all or failed to return for follow-up injections. Consequently, a 5-day communications workshop was developed for the health workers, mainly midwives, involved in the programme. The six modules of this workshop, covering such subjects as communications processes and means of enlisting community support, are listed and its impact is briefly assessed. (DP-E)

10081 **Mason, D., Azhar, R.** *Don't just say "salt"...* UNICEF News (New York), 114(4), 1982, 12-

14. Engl.

When a 1970s Pakistani goitre control project failed to promote the use of iodized salt, efforts were made to strengthen its communications component, which had relied mainly on printed materials incomprehensible to an illiterate audience and on photographs of unveiled women offensive to conservative Muslims. UNICEF advisers tested and perfected a new packet design, used in all subsequent printed advertisements, and prepared radio programmes combining education and entertainment as well as a variety of promotional materials (calendars, cartoon and informational booklets, mobiles, stickers, posters, etc.), many incorporating a religious element. Some of these materials are described here. (DP-E)

10082 **Moynihan, M., Mukherjee, U.** *Visual communication with non-literates: a review of current knowledge including research in northern India.* International Journal of Health Education (Geneva), 24(4), 1981, 251-262. Engl. Refs.

The development of visual health education aids for non-literates is complicated because these aids are not usually created in the most appropriate way, local cultures are generally ignored, and research findings are often not applied to the finished product. The authors conducted three surveys in six Indian villages to test a variety of teaching aids in terms of pictoral recognition (different types of pictures, stylization, familiarity, realism, and simplicity), methods of conveying value (comparison and pairing, colour, and symbols), and the development of a vocabulary of signs. The results of these surveys are discussed and presented as statistical data. (DP-E)

10083 **Odumosu, M.O.** *Mass media and immunization awareness of pregnant women in a Nigerian community.* Canadian Journal of Public Health (Ottawa), 73(2), Mar-Apr 1982, 105-108. Engl.

In order to discover whether government-sponsored radio diffusion of a health message was reaching the target audience, 200 pregnant women attending three types of clinic (run by herbalists, midwives, and the government, respectively) in Ile-Ife, Nigeria, were interviewed regarding their awareness of immunization against tetanus. Over 80% had heard of neonatal tetanus, 75% believed that injection would prevent it, and over 90% claimed to have been protected by immunization. Although 79% of the women possessed a radio, it was the source of information for only 4.5% of them, the rest having heard it from the nurse, relatives, neighbours, etc. It is suggested that more care be taken regarding the time allocation, content, and language of radio-diffused health messages. (HC-L)

III.5 Appropriate Technology

See also: 09803, 09824, 09875, 09919, 10050, 10073, 10127, 10145, 10146.

10084 **Acra, A., Karahagopian, Y., Raffoul, Z., Dajani, R.** *Disinfection of oral rehydration solutions by sunlight.* Appropriate Technology for Health Newsletter (Geneva), (11), Autumn 1982, 8. Engl.

Originally published in Lancet, 6 Dec 1980.

Exposure to sunlight of oral rehydration solutions, even those prepared with contaminated water, in transparent containers has been found to render them bacteriologically safe, without deterioration of the ingredients. A controlled experiment carried out in Beirut, Lebanon, revealed a zero coliform count after exposure of approximately one hour. Solar radiation in the near ultraviolet range, rather than heat, was responsible for destroying the microorganisms, which were unable to grow after 24 hours exposure, thus facilitating the storage and transport of the solution. (DP-E)

10085 **Brolly, E.H.** *Health care data recording system for developing countries.* Tropical Doctor (London), 12(3), Jul 1982, 105-109. Engl. 13 refs.

An integrated framework has been designed for a health care data recording and reporting system for developing countries that indicates appropriate application at all levels of the health care services. This paper outlines the data system and discusses problems related to the following aspects of medical and statistical record-keeping in the developing countries: precise identification and diagnosis of patients; utilization of medical records; quantity, quality, and appropriateness of forms in use; data gathering and channelling procedures; and utilization of various levels of personnel. (HC-L)

10086 **Flood, J.** *Savings — 1; aids to survival for a rural African hospital.* Tropical Doctor (London), 13(1), Jan 1983, 46. Engl.

The 1st in a series of four briefs, this paper describes a locally available, inexpensive, and adequate substitute for the expensive, imported electric sterilizers used in rural African hospitals. Developed in 1981 and known as the "tuster", this device consists of a tureen with a kettle element in the side and washers to prevent leaking. While it requires a full-time attendant and some insulation underneath, the tuster is cost- and energy-efficient and easily operated. (EB)

10087 **Gurney, M., Simmons, W.K., Stone, J., Jutsum, P.J.** *Haematology in developing countries.* British Medical Journal (London), 283, 5 Dec 1981, 1549-1550. Engl.

A simple instrument to screen populations in developing countries for haemoglobin concentration has been designed and is described in this letter. Prototype testing was carried out in antenatal clinics in Jamaica, where the instrument was used to classify blood samples into ranges above 10, from 8-10, and below 8 g:dl. The blood samples were also measured for haemoglobin concentration by the cyanmethaemoglobin method and using a Beckman spectrophotometer. Comparison of 107 blood samples by the two methods indicated that the field

instrument had an accuracy of 97% and a cut-off point of 10 g:dl with sensitivity of 76%. (DP)

10088 **Manja, K.S., Maurya, M.S., Rao, K.M.** *Simple field test for the detection of faecal pollution in drinking water.* Bulletin of the World Health Organization (Geneva), 60(5), 1982, 797-801. Engl. 15 refs.
Also published in French and Russian.
A comprehensive field investigation in several parts of India has revealed that the presence of coliforms in drinking water is associated with hydrogen sulfide-producing organisms. This paper describes a simple, rapid, and inexpensive field test for the screening of drinking water for fecal pollution, based on the detection of hydrogen sulfide. The new test showed good agreement with the standard most probable number (MPN) test and proved highly successful in the field when it was used to detect fecal pollution and to monitor water quality during an outbreak of water-borne hepatitis A infection in Gwalior (India). Statistical data are included. (Modified journal abstract)

10089 **Michon, J.** *Organisation d'un fichier de consultation d'enfants d'âge préscolaire. (Organization of a consultation card for preschool children).* Développement et Santé (Paris), (43), Feb 1983, 16-21. Fren.
Consultation cards for preschool children are an important tool for the organization and provision of health care, providing useful data on the individual child's growth, nutritional status, vaccinations, illnesses, frequency of consultations, etc. This paper describes methods of organizing and using a consultation card system that can provide dispensaries and rural health posts with a better overview of the medical needs of infants and preschool children. By letting the parents retain the record cards between visits, the system encourages them to become more responsible for the health of their children. (EB)

10090 **Salubritas, Washington, D.C.** *Colombia: improved arm circumference tapes.* Salubritas (Washington, D.C.), 6(3), Jul 1982, 1. Engl.
To improve the accuracy of the original Morley-Shakir arm circumference measuring tapes, Colombian health workers designed two 1.5 cm-wide tapes that divide the 1st 6 years of age into seven stages. When tested on 875 children aged 0-71 months from both rural and urban areas, they proved 94% accuracy in detecting mild-to-moderate or severe malnutrition. These tapes can be ordered for about US$0.20 from CIMDER, Apdo. 3708, Cali, Colombia or TALC, 30 Guilford St., London WC1N 1EC, UK. (DP-E)

10091 **Santosham, M., Sack, R.B., Lochlear, E., Foster, S., Garret, S.** *Storing oral rehydration solution.* Lancet (London), 3 Apr 1982, 797. Engl.
An experiment involving 20 batches of WHO-recommended oral rehydration solution (half of them contaminated with *Escherichia coli* and 5 of each group stored at 4° C, with the rest kept at 26° C) revealed that the bicarbonate present remained stable for at least a week at both temperatures and was not affected by contamination with *E. coli*. Nevertheless, refrigeration is recommended wherever possible to prevent bacterial contamination. (DP-E)

10092 **Sharon, A.** *Hospital climate control in developing countries: "the growing open system".* Ekistics (Athens), 49(296), Sep-Oct 1982, 372-376. Engl.
The author recommends the "growing open system" of hospital design — an intermediate technology based on an organic approach using general principles of architecture and systems. He discusses the issues of systems planning based on a site plan encompassing modular construction units: expandibility up to 500 beds (regarded as the optimum size in developing countries); climate control, especially sun protection and ventilation; environment; and energy saving. Diagrams of the general layout of the 1st stage of a 100-bed hospital and a system hospital for a hot, dry climate are included. (DP-E)

10093 **Stéveny, J.** *Standardized interpretation of under-5s weight curves.* Tropical Doctor (London), 12(3), Jul 1982, 133-135. Engl.
Because only a careful interpretation of the weight curve will enable detection of deficient growth in children, the traditional road-to-health chart used in a hospital in Cameroon has been modified to make it easier for health workers to pinpoint nutritional problems. Six series of dots have been added to the chart to indicate a flattening out or falling of the growth curve at certain stages of child development that may occur even though the curve remains, strictly speaking, within the road to health. Each series of dots is coded to an explanation of the type of malnutrition to suspect and the kind of advice to give the mother. This paper presents the modified chart and the explanations that go with it. (HC-L)

10094 **WHO, Geneva.** *New functions for old tools: how to measure the 1/2 an hour needed for sterilization.* Appropriate Technology for Health Newsletter (Geneva), (11), Autumn 1982, 7. Engl.
Also published in French.
Various traditional ways of measuring the 15-30 minutes necessary for sterilization are suggested for use by village-level health workers. These include sticks, the observation of shadows, and country-specific solar watches. (DP-E)

10095 **WHO, Geneva.** *Providing inexpensive glasses in developing countries.* World Health Forum (Geneva), 3(1), 1982, 62-63. Engl.
Glasses, which are essential to the well-being and social and economic usefulness of many people everywhere, are often unobtainable because of their high cost. WHO projects in Pakistan and the Sudan are at present trying to find ways of overcoming this obstacle. In Pakistan, the screening of children's eyesight by schoolteachers

has also been tried out on a small scale with encouraging results. (Modified journal abstract)

10096 **Zamarripa-Torres, C.** *Asistencia médica y educación para la salud. (Medical attention and health education).* Gaceta Médica de México (Mexico City), 116(9), Sep 1980, 386-388. Span. 13 refs.

The health education needs of the lower-class (30% illiterate) Mexican population not covered by social security health services and of support staff and nonprofessionals working in hospitals are briefly considered. Various government authorities have combined to formulate a plan for creating a central health education agency able to coordinate the activities already taking place in a number of health care institutions. This plan's immediate objectives are: 1) to inform patients seeking curative services about preventive and other types of care, 2) to instruct them in the proper use of services, and 3) to involve all levels of health personnel in health education activities. (RMB)

IV Health Workers — Training and Utilization

IV.1 Medical Personnel

IV.1.1 Professional

See also: 09811, 09812, 09819, 10144, 10154, 10182, 10185, 10255, 10269, 10305.

10097 **Bollag, U.** *Problem-based medical education in Nigeria.* Tropical Doctor (London), 12(3), Oct 1982, Part 1, 176-181. Engl. Refs.

The 1977 recommendations of a Nigerian group concerned with making physician education more community-oriented and responsive to the environment have been used to create a programme known as COBES (community-based experiences and services) at the Unilorin Medical School. Described in this article are the programme's background, implementation, and numerous obstacles and constraints. Despite an auspicious beginning, the programme was unfortunately hampered by government interference and the limitations of its own participants, who were all products of Western-style medical training. (DP-E)

10098 **Central African Journal of Medicine, Salisbury.** *Higher Zimbabwean medical degrees and diplomas.* Central African Journal of Medicine (Harare), 27(8), Aug 1981, 161. Engl.

In 1982, Zimbabwe's Institute of Medical and Allied Professions introduced a number of speciality training courses for physicians in order to reduce the amount of time and money lost when doctors take such courses abroad, discourage emigration, and make physician training more appropriate to the needs of the country. These include 4-5 year in-service training programmes in areas such as pathology, medicine, surgery, obstetrics and gynaecology, and pediatrics, with a 2-year course in public health and a 1-year course in clinical pharmacy. In addition, because the need for specialists is limited, there are eight diploma courses, most of 1 year's duration, in various areas of primary health care. (DP-E)

10099 **Centre International pour le Développement Social et la Santé Communautaire, Bordeaux, France.** *What new kind of training for rural health doctors in the Third World?* Bordeaux, France, Centre International pour le Développement Social et la Santé Communautaire, Cahiers du CIDESSCO — Research and Application Class B, No. 1, May 1984. 48p. Engl. Refs.

In 1972, the *Gonoshasthaya Kendra* or People's Health Center was estabished at Savar, a rural Bangladesh village with no existing health services. Among its accomplishments are the provision of both preventive and curative medicine, the creation of a health insurance scheme and rural credit cooperatives, the training of midwives and community health workers, the implementation of a number of rural development programs (some aimed specifically at women), literacy training, and the foundation of an elementary school. This report contains a review of the health centre's history and the proceedings from two conferences organized to discuss and evaluate its experience and to plan the training of local physicians. Proposals for setting up a medical school and the mission report from August 1983 are included. (RMB)

10100 **Desai, A.B.** *Teaching of integrated maternal and child health and family welfare.* Indian Pediatrics (Calcutta, India), 18(7), Jul 1981, 435-441. Engl.

A two-stage maternal child health training programme for medical students in operation since July 1976 at Ahmedabad, India, is described. The 36-hour curriculum for undergraduates, which comprises the 1st stage, is presented in some detail. The 2nd stage involves a 3-month posting at a rural maternal child health centre during internship. Modifications that have taken place in the programme, in which six teams of WHO fellows had participated at the time of writing, are briefly discussed. (Modified journal abstract)

10101 **Gaceta Médica de México, México.** *Simposio sobre educación médica continua. (Symposium on continuing medical education).* Gaceta Médica de México (Mexico City), 117(6), Jun 1981, 215-250. Span.

This collection of eight papers presented at an unidentified Mexican symposium on continuing medical education covers: the concept of continuing education; its objectives, goals, and approaches; the role and responsibilities of health institutions, medical schools, and medical societies and academies; characteristics of the Cuban system; and its effect on professional competence and the quality of care. A final paper lists the symposium's participants and reviews the general themes. Statistical data are included in several of these contributions and one contains proposed continuing education curricula for specialties such as pediatrics, gynaecology and obstetrics, internal medicine, etc. (RMB)

10102 **Hall, A.J.** *Provincial health officer in Papua.* Papua New Guinea Medical Journal (Port Moresby), 25(1), Mar 1982, 50-52. Engl.
A former expatriate provincial health officer in Papua New Guinea briefly describes the facilities available and the problems encountered during his 2-year posting in the Gulf Province. (DP-E)

10103 **Lennox, C.E.** *Medical superintendent in the highlands of Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 127-130. Engl. 8 refs.
In this essay, the author describes his years of experience as a volunteer medical officer at a remote health centre at Dogura, and as a medical superintendent at the Enga Provincial Hospital at Wapenamanda, Papua New Guinea. He examines the ways in which Enga Province has evolved one of the country's most cooperative and effective health care systems and how medical staff overcame disruptive elements to establish a cohesive service. Good communication, organization, cooperation, teaching, and management skills are considered essential for a medical superintendent and bush experience is the ideal preparation for such a posting. (EB)

10104 **Philip, E.** *Development of MCH curriculum for the undergraduates in medical colleges.* Indian Pediatrics (Calcutta, India), 18(7), Jul 1981, 429-433. Engl.
In January 1975 the Ad Hoc Committee on Pediatric Education recommended that the content, planning, implementation, and assessment of a suitable maternal child health curriculum should be formulated and that a handbook of maternal child health and family planning appropriate for undergraduates at India's medical schools should be prepared. The curriculum later drafted was pretested at the medical schools in Ahmedabad and Trivandrum. This article describes the training programme implemented at the latter school. (DP-E)

10105 **Piyarsin, P.** *Doctors' role in primary health care.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 196-202. Engl. 12 refs.
Doctors in developing countries with large rural populations such as Thailand face difficult adjustments as they adapt to changing roles. Their functions within a primary health care-oriented rural health system and in district hospitals are examined. Because Western-style medical education does not prepare them for these new roles, the need to reorient physician training is stressed. (DP-E)

10106 **Smilkstein, G.** *Medical education in Indonesia: primary care and community health.* Journal of Medical Education (Chicago, Ill.), 57(5), May 1982, 386-392. Engl. 11 refs.
Fifth Internal Medicine Congress of Indonesia, Samarang, Indonesia, 1982.
Curriculum changes are being made in medical schools in non-industrial countries in order to produce graduates who have a better understanding of the assessment and management of community health problems. The rationale for such changes exists in the context of appropriately balancing a country's limited resources with unmet medical needs in rural and poor areas. Indonesia's efforts to improve its medical students' qualitative and quantitative participation in community health activities are discussed, with examples from the community health programme of the Udayana University Medical School in Denpasar, Bali. (Modified journal abstract)

10107 **Tulloch, A.** *Role of the paediatrician in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(3), Sep 1982, 182-185. Engl.
The author relates his personal experiences as specialist medical officer in pediatrics at the Angau Memorial Hospital in Lae, Papua New Guinea, where his roles included those of organizer, supervisor, teacher, and consultant. He suggests that, since hospital nursing staff have a wide range of responsibilities, including inserting intravenous needles and performing lumbar punctures and other technical procedures, the expatriate pediatrician — in order to justify his continuing presence in the country — should direct his attention to research into common problems of maternal child health and into primary health care schemes, areas which would benefit large numbers of people in both rural and urban parts of the country. Endeavours to improve the organization of the health system should also be undertaken by the pediatrician. (EB)

10108 **Wone, I., Lauture, H. de** *Médecine interne et médecine rurale en Afrique de l'Ouest. (Internal medicine and rural medicine in West Africa).* Dakar Médicale (Dakar), 26(3), 1981, 388-391. Fren.
In West Africa, general practitioners in rural areas, unlike urban doctors with a variety of medical resources at their disposal, must learn to be good internists. In their endeavours to overcome the numerous economic, social, and physical constraints encountered, they will find their mental outlook changing considerably. Limited funds, equipment, and drugs will force them to make efficient use of what is available. They must learn to understand the peoples' beliefs, thought processes, and language and must motivate the community through health education. Physical constraints include adverse climatic conditions that can affect equipment, drugs, and vaccines and lack of adequate postal, telephone, and transportation services. Efforts must be made to overcome difficulties in communication, which can reduce a health team's mobility and cause feelings of isolation. (EB)

10109 **Woodruff, A.W.** *New medical school in Central Africa.* Lancet (London), 4 Sep 1982, 545-546. Engl.
Africa's newest medical school (founded in 1978) is located in Juba, the capital of Equatoria, an isolated and underdeveloped area of the Sudan. The teaching and hospital facilities for the 1st class of 16 students are described; there are shortages of everything except pa-

tients. The school's present and future needs are briefly considered. (DP-E)

IV.1.2 Auxiliary

See also: 09819, 10053, 10070, 10163, 10165, 10171, 10175, 10176, 10178, 10183.

10110 Bahia, Brasil, Secretaria de Saúde de Estado. *Introdução de inovações metodológicas na capacitação do auxiliar de saúde (IIMCAS): experimento. (Introduction of new methods of health auxiliary training (IIMCAS): an experiment).* Salvador, Brasil, Secretaria de Saúde de Estado da Bahia, Série de Estudos em Saúde, No. 2, 1980. 69p. Portuguese. 9 refs.

A new approach to the training of health auxiliaries was tested in a 2-week continuing education course offered to practicing auxiliary health workers in the city of Brumado, Bahia, Brazil. The course emphasized group discussion and problem-solving techniques; the content focused on the study of the community but also included some topics requested by the participants such as first aid and the giving of injections. The methodology was found to be suitable for application at this level and this report describes the course aims, methods, activities, content, research results, and evaluation. (HC-L)

10111 Chen, P.C., Tan, Y.K. *Primary health care among the Iban of Sarawak.* Tropical and Geographical Medicine (Amsterdam, Netherlands), 33(4), Dec 1981, 403-409. Engl.

A government project was established in Sarawak, Malaysia, to provide primary care services to some 5 000 tribal Iban by means of 15 locally-selected village health aides, of whom 11 were *manangs* or traditional healers. A 2-week training course emphasized first aid, diagnosis of common ailments, prescription of simple medicines labelled with appropriate drawings, collection of blood films and sputum samples, maternal child health practices such as oral rehydration and immunization, and the promotion of nutrition and environmental health activities. Each month the aides return to local health centres for supplies and retraining. Hospital admissions have been reduced by 48% since the programme was initiated. Statistical data are included. (DP-E)

10112 Cross, I. *Training primary health care workers in Upper-Volta.* Medical Education (Oxford, UK), 16(2), Mar 1982, 102-104. Engl.

In collaboration with aid agencies and government health workers, Save the Children Fund medical staff have been involved in the training of primary health care workers in the Sahel region of Upper Volta. This report deals specifically with the problems involved in training illiterate health workers, including those of translation into various dialects, audiovisual teaching aids and methods (such as colour-coded drug dispensers), and evaluation. (Modified journal abstract)

10113 Crouch, P.R. *Changing role of the health extension officer in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 77-78. Engl.

Until recently, the profession of health extension officer (HEO) in Papua New Guinea was ill-defined and lacking career structure; HEOs were maldistributed throughout the country and rarely stayed at a health centre for more than 1 year. Today, with more emphasis being placed on specific disease control programmes, the HEO spends more time ensuring the regularity of treatment of tuberculosis, leprosy, and sexually transmitted diseases. National and provincial health plans have consolidated his role within both the community and the Department of Health, where he carries out administrative duties and manages clinical problems. The author expresses the idea that, despite the increased interest of medical graduates in entering extension work and thus perhaps causing displacement of HEOs, the HEO is likely to remain officer-in-charge at health centres. (ER)

10114 Ennever, O.N., Standard, K.L. *Training primary health care workers for the Caribbean.* World Health Forum (Geneva), 3(2), 1982, 156-158. Engl.

In 1967-1968, the University of the West Indies (Kingston, Jamaica) Department of Social and Preventive Medicine instituted the Community Health Aide (CHA) Programme to train local residents as primary care auxiliaries to work as part of a health team under the supervision of medical professionals. A detailed CHA job description is presented. The results of two pilot projects in 1968 and 1969, briefly reported here, led to the expansion of the programme to other parts of Jamaica and the Caribbean. (DP-E)

10115 Rienks, A.S., Iskandar, P. *Primary and indigenous health care in rural central Java: a comparison of process and contents.* Yogyakarta, Universitas Gahjah Mada, Fakultas Kedokteran, Program Pendidikan Kedokteran Komunitas, Laporan Hedera No. 4, 1981. 89p. Engl., Javanese. 19 refs.

Indonesia is currently preparing a nation wide system of cadre or village health worker programmes as part of its primary health care activities. Although considerable interest in the cadre programme has been shown by village leaders and numerous candidates have been trained, there is evidence that cadres are not being selected or utilized by the populations that they are intended to serve. On the basis of anthropological research conducted over a 3-year period, this paper describes the operational characteristics of the cadre programme and contrasts it with the indigenous medical system. It is concluded that the former has much to learn from the latter and the development of a more open network of public self-help is advocated. (HC-L)

10116 Stark, R. *Sociopolitical issues in the utilization of nonprofessional primary health care workers.*

Palo Alto, Cal., Hesperian Foundation, n.d. 12p. Engl. 27 refs.
UNESCO-International Sociological Association's World Congress of Sociology, Mexico, 16 Aug 1982.

This paper reviews the various political aspects of the deployment of village health workers in Latin America and other Third World countries. Although difficult to document, but common knowledge in the community of international health professionals, community health workers have been used by governments to gather data on the identity and movements of insurgents (the 'spy' function). They have also been used as 'cooling agents' in potentially explosive situations, with the intention of weakening the community's demand for better living conditions and health. In many areas, health workers trained by non-government organizations — and sometimes even by the government — have become targets for repression because they engage in community efforts aimed at improving village life, however apolitical these efforts may seem. Examples are given from Latin America, Thailand, and Bangladesh. (HC-L)

IV.2 Nursing Personnel

IV.2.1 Professional

See also: 10178, 10179, 10265, 10276.

10117 **Burke, G.A.** *Preparación para la enfermería de socorro en situaciones de desastres en el Caribe. (Preparation for emergency nursing during disasters in the Carribean).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(3), Sep 1981, 262-267. Span.

In 1979, a hurricane struck Roseau, the capital of Dominica, causing great devastation. A group of nurses attending a conference in the city were able to provide disaster relief. Later, at the request of the nurses (who felt that their training in disaster relief had been inadequate), WHO organized a regional workshop on the subject in Bridgetown, Barbados, in May 1980. This paper briefly summarizes the objectives and content of the workshop. The need to formulate national emergency nursing plans to deal with disasters when they occur was particularly stressed. (HC-L)

10118 **Lassonde, A.** *Matamoros mixe. (Matamoros mix).* Nursing Québec (Montreal, Que.), 2(2), Jan-Feb 1982, 29-30. Fren.

A Canadian nurse relates her experience in the remote village of Matamoros (population 4 000) in Mexico's Sierra de Oaxaca region. Her voluntary work included procuring essential drugs, teaching primary care to selected villagers, and promoting preventive medicine. She found that health services of any kind were non-existent in Matamoros, drinking water was unsafe, and digestive and respiratory disorders were the most common illnesses among the tribe. (EB)

10119 **Tejada de Rivero, D.A.** *Nursing in health care.* World Health (Geneva), Jul 1982, 3-4. Engl. Also published in French, German, Persian, Russian, and Spanish.

This essay looks at some opportunities and challenges for nursing personnel within the framework of primary health care systems during the forthcoming decades. In a profession that can no longer operate in isolation, nurses must foster and maintain active participation of the community in improving its own health. They have the ability and responsibility to make radical changes in health systems, and with their involvement in decision-making processes, this can influence health policies on national and international levels. Collaborating with teachers, agricultural extension workers, community development workers, etc., they can create practical links with these sectors. The need for fully exploiting such links is expressed. (EB)

IV.3 Midwives and Family Planning Workers

IV.3.1 Professional

10120 **Muringo Kiereini, E.** *Nurse-midwife.* World Health (Geneva), Jul 1982, 6-10. Engl.

In rural Kenya, nurse-midwives in maternal child health clinics known as Service Delivery Points (SDPs) have an important family-centered, community-centered role. They function as supervisors, trainers, and practitioners; contribute to preventive, curative, promotive, and rehabilitative aspects of health services; are involved with pre- and postnatal care, labour, and delivery; deal with emergencies in the absence of doctors; educate mothers on child health, hygiene, nutrition, and family planning; and make home visits in mobile clinics. In view of many rural women's preference for home delivery, nurse-midwives form an important link between traditional birth attendants (TBAs) and health unit personnel. They must develop, implement, and evaluate curricula for training TBAs. Further roles include collaboration with agriculture and social services personnel and community leaders and participation in social activities such as self-help groups and women's organizations. (EB)

IV.3.2 Auxiliary

10121 **Ampofo, D.A., Nicholas, D.D., Amonoo-Acquah, M., Ofosu-Amaah, S., Neumann, A.K.** *Training of traditional birth attendants in Ghana: experience of the Danfa rural health project.* Tropical and Geographical Medicine (Amsterdam, Netherlands), 29(2), Jul 1977, 197-203. Engl.

Maternal mortality remains high in Ghana, where 75% of births are attended by untrained personnel, including traditional birth attendants (TABs), who are mainly elderly, illiterate farmers. The Danfa project trained 57

of these TBAs; this paper describes the design of the programme and problems encountered and makes recommendations to others considering similar programmes. Statistical data are included. (Modified journal abstract)

10122 **Brink, P.J.** *Traditional birth attendants among the Annang of Nigeria; current practices and proposed programs.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1883-1892. Engl. 71 refs.

This paper describes the current practices of rural Annang (Nigeria) traditional birth attendants during the four stages of labour, the practices of US and Nigerian obstetrical teams, and a training programme for traditional birth attendants. These practices are compared and contrasted and recommendations aimed at the traditional birth attendant are set forth. (Modified journal abstract)

10123 **Développement et Santé, Paris.** *Formation des matrones traditionelles (instruites). (Training of traditional birth attendants).* Développement et Santé (Paris), 41, Oct 1982, 19-23. Fren.

While many traditional birth attendants (TBAs) have extensive experience, few have had formal training in practical aspects of pregnancy and childbirth. Unexpected accidents continue to happen at the moment of delivery resulting in the death of mother and/or baby. This paper briefly outlines the steps of a course aimed at teaching TBAs the following: development of the foetus, hygiene and nutrition during pregnancy, preparation for delivery, procedures during delivery, removal of the placenta, danger signs, and return of the menstrual cycle. (EB)

10124 **Mani, S.B.** *Review of midwife training programs in Tamil Nadu.* Studies in Family Planning (New York), 11(12), Dec 1980, 395-400. Engl.

A 10-month field study was carried out during 1975-1976 to review and evaluate the Tamil Nadu (India) government training programme for traditional birth attendants (TBAs), using data obtained from 65 questionnaires returned by medical officers from primary health centres. Problems related to the training course itself included a lack of specified teaching equipment and aids and a failure to distribute certificates and UNICEF midwifery kits to all of the 579 TBAs who successfully completed it. Only 54% of them stayed in contact with the training centre and less than 10% became involved in family planning efforts. Since 80% of medical officers surveyed were in favour of continuing the courses, suggestions for improving them are given. Statistical data are included. (DP-E)

10125 **WHO, Geneva.** *Extension of health service coverage with traditional birth attendants: a decade of progress.* WHO Chronicle (Geneva), 36(3), 1982, 92-96. Engl.

This article outlines the progress in the use of traditional birth attendants (TBAs) to extend the coverage of governmental health services during the period between WHO's questionnaire survey of 37 countries in 1972 and its 2nd review of 64 countries in 1982 and describes the innovative approaches by some countries to the use of TBAs that could be adapted elsewhere. Training courses for TBAs have expanded over the years and show diversity in content, duration, and manner of operation; however, shortages of supervisory health personnel, inadequate transport, and insufficient financial resources continue to impede progress. The following approaches are considered: specific incorporation of TBAs into national health strategies, pioneering projects that culminate in national TBA training programmes, expansion of TBA's role to include family planning, and use of TBAs to staff rural maternity centres. (EB)

IV.4 Dental Personnel

IV.4.1 Professional

See also: 09824.

10126 **Jeboda, S.O.** *Preventive dental practice in developing nations: the roles of dental education and dental health education.* Odontostomatologie Tropicale (Dakar), 4(4), Dec 1981, 203-209. Engl. Refs.

Present-day dentistry in both developed and developing nations lacks sufficient preventive practice. In the developed countries, this deficiency has been attributed to shortcomings in dental training programmes and to the absence of monetary incentives. The main problem in the developing countries is in the undergraduate training programmes, most of which have been based on those in developed nations. It is suggested that dental health education has a crucial role to play in the prevention of dental diseases and developing countries should make the best use of well-planned dental health education programmes to improve the oral health of their populations. (Modified journal abstract)

IV.5 Laboratory and X-ray Technicians

See also: 10130.

10127 **Adeyokunnu, A.A., Topley, E.** *Place of simple laboratory support in primary health care of sickle-cell anemia.* East African Medical Journal (Nairobi), 58(11), Nov 1981, 828-837. Engl. 14 refs.

Regular medical care in special clinics has been shown to be important in the maintenance of good health and avoidance of crises in children with sickle-cell anaemia. Such clinics are rare, however, in the rural areas where most of these children live. Based on experience with 118 sickle-cell patients at the Igbo-Ora Rural Health Centre, Ibarapa District, Oyo State, Nigeria, this paper describes the contribution of simple investigations that can be performed by a laboratory assistant in a rural health centre in the follow-up management of patients with

sickle-cell anaemia. The investigations include estimation of packed cell volume, examination of thick blood smears for malaria parasites, and the examination of thin blood smears for malaria pigments and various other abnormalities. (HC-L)

10128 Rosenbaum, H.D. *Lessons learned from a radiologic paramedic training effort in Nicaragua.* Diagnostic Imaging (Basle, Switzerland), 51(3/4), 1982, 180-182. Engl.

In 1977, University of Kentucky (USA) staff experienced in teaching diagnostic radiology to medical assistants organized an 18-week training course for 42 X-ray technicians in Nicaragua. Although government upheaval prevented proper evaluation of the course and contributed to the further deterioration of the country's already straightened radiological services, the author points out that prospective students and Spanish-language teaching materials do exist, although instructors should be prepared to improvise teaching aids, and local physicians were very cooperative. He also presents eight recommendations for planning further training courses and services. (DP-E)

IV.6 Environmental Health Workers

10129 Brogan, J. *Physiotherapist in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(3), Sep 1982, 186-188. Engl.

This paper looks at the role of the physiotherapist in Papua New Guinea, with special reference to the present physiotherapy situation and future possibilities at the Port Moresby General Hospital. The disabilities of both in- and outpatients treated by the physiotherapist include acute and chronic chest, neurological and orthopedic conditions, acute surgical conditions, burns, and leprosy. The author makes some suggestions regarding improvements to the present system, especially in the area of training. (EB)

10130 Carney, J., McCoy, L. *Training of trainers workshop for technical training in water supply and sanitation.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report, No. 45, Jun 1982. 119p. Engl.

Training of Trainers Workshop for Technical Training in Water Supply and Sanitation, Washington, D.C., 21-27 Feb 1982.

Ten participants attended this WASH workshop, which was designed and implemented by two professional trainers. After conducting a needs assessment, they taught learning, communication, and motivational theory in an experimental approach that required the active involvement of the participants; actual practice in the planning and delivery of training was also provided in the workshop, with emphasis on training for task performance. This document presents background information, a description of the design process, a report of the proceedings, and recommendations; appendices contain lists, handout materials, and references. (DP-E)

10131 Gearheart, R.A., Calbert, C.E. *Rural Sanitation and Manpower Development Project (RSMD): the development of appropriate technology and the improvement of curricula for training of sanitarians.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report, No. 18, 7 Mar 1981. 1v.(various pagings). Engl.

After technological and community factors impeding the development of safe drinking water supplies and effective waste disposal systems in Indonesia were identified, this workshop was held to address some of these problems. This document contains background information, a summary of the proceedings of two discussion groups and general discussions on appropriate technology, research proposals, and recommendations. Additional discussion results and a paper on the development of technology through institutions for sanitation education can be found in the appendices. (DP-E)

IV.7 Occupational and Physical Therapists

See also: 09927.

10132 Rodgers-Wilson, M. *Occupational therapist in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 123-126. Engl.

This article looks at the duties and responsibilities of the occupational therapist (OT) and the development of the Occupational Therapy Department at Port Moresby General Hospital in Papua New Guinea. Providing rehabilitation programmes for hospital patients with head and spinal injuries, degenerative neurological diseases, blindness, amputations, and leprosy, the OTs act also as consultants and coordinators in specialized aspects of community care. The Port Moresby Sheltered Workshop, or Rehabilitation Centre, employs both physically and mentally disabled adults and is managed by volunteers. The need for providing Papua New Guineans with overseas physical therapy training is stressed. (EB)

IV.9 Teaching Aids

IV.9.1 Health Care, Nutrition, and Disease Control

10133 Caribbean Food and Nutrition Institute, Kingston, Jamaica. *Use of mass media in food and nutrition programmes: guidelines for planners and decision-makers.* Kingston, Jamaica, Caribbean Food and Nutrition Institute, 1978. 32p. Engl.

Technical Group Meeting on the Use of Mass Media in Food and Nutrition Programmes, Kingston, Jamaica, 12-18 Sep 1976.

This document contains the guidelines formulated by the participants at a 1976 meeting held to determine how the mass media could cooperate with the food and nutrition sectors to improve the nutritional status of the Eng-

lish-speaking Caribbean. These guidelines suggest that the application of certain principles and procedures will appreciably increase the chances of success of mass media action in regional food and nutrition programmes and help to identify the extent of mass media collaboration with food and nutrition personnel in the solution of nutrition problems, the range and scope of their commitment, and what is needed in terms of training and research to translate this commitment into positive action. (DP-E)

10134 **Carroll, R.F.** *Sanitation for developing communities*. London, Department of the Environment, Building Research Establishment, Overseas Building Notes, No. 189, May 1982. 11p. Engl. 12 refs.

This brief publication lists the various sanitation systems in general use in developing countries, compares their relative suitabilities under differing circumstances, and adds some brief comments on health hazards and risks of pollution of soil and groundwater. Many illustrations are included. (Modified journal abstract)

10135 **Consejo Mundial de la Alimentación de las Naciónes Unidas, Roma.** *Estrategias alimentarias nacionales para eliminar el hambre. (National food strategies to eliminate hunger).* Roma, Consejo Mundial de la Alimentación, Apr 1982. 50p. Span.

This pamphlet, intended mainly for officials in developing countries and aid agencies, analyzes the concept of a national food strategy and sets forth the steps for its preparation, implementation, and evaluation. Organizational questions and issues related to food production and consumption are also examined. Although the reader is reminded that national policy must be based on the problems and conditions specific to each country, ways of promoting international cooperation and obtaining international aid are also considered. (RMB)

10136 **de Glanville, H.** *Hand; management of acute infections and soft tissue injuries*. Nairobi, African Medical and Research Foundation, Rural Health Series, No. 8, 1979. 25p. Engl.

This booklet describes the proper management of common acute problems of the hand (i.e. injuries, infections, and burns) so that primary health workers in dispensaries or health centres will know how to apply first aid, when and how to operate, and when to refer to a larger centre. Instructions are clearly written and accompanied by simple line drawings. (HC-L)

10137 **de Glanville, H., Schilling, R.S., Wood, C.H.** *Occupational health*. Nairobi, African Medical and Research Foundation, Rural Health Series, No. 11, 1979. 249p. Engl.

Care of the health of workers aids productivity, on which much development depends, while the environment has particular elements that affect health as well as some extra diseases and injuries. This book describes in a simple way the information needed to understand, manage, and prevent the health problems of workers. It is intended for health workers, safety officers, and others in management positions in the hope that training opportunities in the area of occupational health will be increased. (DP-E)

10138 **De Sweemer, C., SenGupta K., N., Takulia, S.B.** Rural Health Research Centre, Narangwal, India. *Manual for child nutrition in rural India*. New Delhi, Voluntary Health Association of India, 1978. 271p. Engl.

Based on numerous years of practical experience at the Narangwal Rural Health Research Centre (India), this manual was written to assist health workers in teaching nutrition education to rural families. The following areas are covered: infant growth, anthropometric measurements, malnutrition, nutrients, proteins, vitamins, energy and protective foods, balanced meals, milk, caloric requirements, breast- and bottle-feeding, feeding of young children and adults, difficulties in providing sufficient food, methods in teaching nutrition, and community diagnosis. Numerous line drawings, graphs, and tables are included. (EB)

10139 **Dioouari, E., Laurent, C.** *Bouillie enrichie, qu'est-ce que c'est? (What is enriched porridge?).* Développement et Santé (Paris), 41, Oct 1982, 5-13. Fren.

Aimed at mothers of infants and growing children, this instructional paper looks at the nutritional qualities of porridge and presents recipes of easily assimilated food combinations, specifically adapted to the child's transition from breast milk to adult foods. Daily caloric requirements; protein, vitamin, and mineral content of foods for growth, for energy, and for protection; and methods of preparation are discussed with the use of three tables. (EB)

10140 **Eshuis, J., Manschot, P.** *Communicable diseases; a manual for rural health workers*. Nairobi, African Medical and Research Foundation, Rural Health Series, No. 7, 1978. 349p. Engl.

This book, aimed at the rural health workers of Tanzania, is an attempt to present all the essential information on communicable diseases from both clinical and public health aspects. As well as providing guidance on treatment, the authors suggest how the health worker can use health education, vaccination programmes, and environmental sanitation as preventive measures; the need to involve community leaders is stressed. Early detection and reporting of outbreaks of epidemic diseases are also discussed. (DP-E)

10141 **Fountain, D., Courtejoie, J.** *Infirmier; comment bâtir la santé; manuel de santé communautaire. (Nurse; how to build health; manual of community health).* Kangu-Mayumbe, Zaïre, Bureau d'Etudes et de Recherches pour la Promotion de la Santé, 1982. 684p. Fren. 39 refs.

Designed for nurses in developing countries, this comprehensive, illustrated manual of community health

aims to provide simple, easy-to-apply techniques for the effective safe-guarding of health. Part 1 looks at the role and organization of a health centre, methods of changing health habits of the population, and community diagnosis. The 2nd part describes methods of prenatal care, maternal child care, birth control, and family planning, while the 3rd part deals with the control of enteric and contagious diseases, vaccinations, and safe water supply. Improving food and nutrition and nutrition education are covered in the final section. At the end of each chapter there are a number of relevant questions addressed to the nurse. Numerous tables, charts, graphs, and sample forms are included. (EB)

10142 **Hamilton, G.** *Health handbook for the tropics.* London, Voluntary Service Overseas, 1982. 111p. Engl.

This handbook, a revised version of the author's earlier publication called "Health Handbook for Volunteers", discusses most of the common conditions and illnesses that an individual is likely to encounter while working on projects in the tropics. The disease headings are listed in alphabetical order for easier reference; a brief outline of the symptoms, details on prevention, and simple instructions on treatment are provided. The first-aid information is designed in such a manner that the solitary person can treat him- or herself unaided. Emphasis is placed on hygiene, sanitation, and nutrition. Included is some straightforward advice on culture shock and psychological stresses frequently suffered by volunteers during the 1st weeks of posting. (EB)

10143 **Hendrata, L., Johnston, M.** *Manual for community based underfives weighing program.* Jakarta, Yayasan Indonesia Sejahtera, 1978, 28p. Engl.

Developed as a result of a community-based child health and nutrition programme, this manual presents a step-by-step explanation of procedures for setting up a community-based under-fives weighing programme. These include: (a) general information on the importance of recording a child's weight; (b) preparing and implementing the weighing programme, e.g. programme size, equipment, seeking community participation, etc.; (c) completing the 'Road-to-Health Card'; (d) assessing the success or failure of the programme and further encouraging the improvement of health and nutrition of the community; and (e) countering problems in the weighing sessions. A description of the dacin scale used in the programme and four sample weight charts are included. (EB)

10144 **Hendrickse, R.G.** *Paediatrics in the tropics: current review.* Oxford, UK, Oxford University Press, 1981. 375p. Engl. Refs.
Tropical Pediatrics Update Course/Workshop, Liverpool, UK, Mar-Apr 1979.

In 1979, the Liverpool School of Tropical Medicine held a workshop for pediatricians in tropical developing countries in order to provide them with an opportunity to keep in touch with international opinion and advances in knowledge relevant to their sphere of interest and activity. The lectures from the conference have been compiled in this handbook under the following sections: priorities in neonatal medicine in the tropics; general pediatrics, with emphasis on nutrition; infectious and parasitic diseases; and delivery of child health services (especially immunization). (HC-L)

10145 **Hutt, J.K.** *Rattan and bamboo.* Arundel, UK, Institute of Child Health, Disabilities Study Unit, 1979. 1v.(unpaged). Engl.
See also entry 7340 (volume 11).

This document contains blueprints or working drawings for the construction of a number of rattan and bamboo physical aids for handicapped children, which were designed by the author when she was working as a physiotherapist in Johore, Malaysia. The equipment, which is intended to be culturally acceptable as well as inexpensive and easy to construct, includes a variety of chairs and walkers, both with and without wheels. (DP-E)

10146 **International Reference Centre for Community Water Supply and Sanitation, The Hague.** *Practical solutions in drinking water supply and wastes disposal for developing countries.* Rijswijk, Netherlands, International Reference Centre for Community Water Supply and Sanitation, Technical Paper Series, No. 20, 1982. 1v.(various pagings). Engl. Refs.

This monograph presents engineers in developing countries with alternative technological solutions for water supply and waste disposal in rural areas. Local materials and skills are promoted and where possible the usefulness, disadvantages, and limitations of the techniques described are discussed. There are sections on water collection from different sources, water treatment, water transport and distribution, and wastewater and solid waste disposal. Many diagrams are included and there is an index. (Modified journal abstract)

10147 **Khanm, N.A., Baker, J.** *Nutrition and health care for the young child.* Islamabad, Health Publications, 1979. 126p. Engl. 39 refs.

This is the 1st manual of its kind to be written, published, and designed specifically for use in Pakistan. Modeled on the UN Protein Advisory Group's "Manual on Feeding Infants and Young Children", it contains practical information on pregnancy, nutrition, breast-feeding, diarrhea, dehydration, oral rehydration, infant feeding, child care, and infectious diseases geared for village-level health personnel. There are many tables, illustrations, and photographs; appendices include a glossary, references, and weaning food recipes using locally available foods. (DP-E)

10148 **McCusker, J.** *Epidemiology in community health.* Nairobi, African Medical and Research Foundation, Rural Health Series, No. 9, 1978. 1v.(various pagings). Engl.

This book was written for use in training of medical assistants who are responsible for both the clinical and

the community health functions of rural health centres in Tanzania. It is not a textbook but rather a manual of ideas and techniques of practical application. Some of the topics covered include: community health, preventing and treating disease, using numbers and graphs, samples and surveys, screening, evaluating health services, improving the quality of services, records and registers, and definitions of technical terms and concepts. There are also test questions and answers on the material covered. (DP-E)

10149 **Ministerio de Industria, Dirección Tecnológica, Laboratorio de Tecnología de Alimentos, Managua.** ***Produzcamos alimentos sanos y seremos un pueblo sano. (Let's produce healthful food and we'll be a healthy people).*** Managua, Laboratorio de Tecnología de Alimentos, Serie Gráfica, No.2, Aug. 1981. 47p. Span.

Intended for the health education of rural and urban workers in Nicaragua, this book explains, in simple language and with many drawings, a number of issues related to food processing and health. It discusses the types of microorganisms that can affect food and the diseases they cause in the people who consume it. Ways in which foodstuffs become contaminated are described and preventive measures stressing proper hygiene in the home and workplace outlined. (RMB)

10150 **Moody, T.** *Simple laboratory investigations into diarrhoea.* Diarrhoea Dialogue (London), 11, Nov 1982, 6. Engl.

Laboratory workers using simple, basic equipment (a microscope with slides and coverslips, saline solution, pipettes, and some basic stains and litmus paper) cannot carry out complete investigations but can nevertheless provide useful information for the management of diarrhea. They can assess the appearance of the stools and test for Ph, and instructions are also given for preparing a saline solution that can be examined for microorganisms causing amoebic and bacillic dysentery, flagellates, and *Vibrio cholerae*. The production of a hanging drop preparation is briefly described. (DP-E)

10151 **Negrel, A.D., Feuillerat, J., Chevet, M., Gajac, P.** *Basic notions of paediatric ophthalmology.* Children in the Tropics (Paris), (134), 1981, 2-67. Engl.

This booklet, translated from a French original compiled by three eminent ophthalmologists in Mali, covers the anatomy of the human eye, its physiology, methods of examination, and major ocular syndromes. There are separate sections on trachoma, xerophthalmia, glaucoma and cataracts, and traumatology, with a final section on ophthalmological treatment. A number of drawings are included. (Modified journal abstract)

10152 **Nordberg, E.** *Essential drugs.* AFYA (Nairobi), 16, Apr-Jun 1982, 55-76. Engl.

Based on WHO's list of essential drugs, this article is intended to help African health workers select the most appropriate and cost-effective products from those available. The three-part list (main list; complementary drugs; and route of administration, pharmaceutical forms, and strengths) comprises 28 types of medications ranging from analgesics to vitamins and minerals. Indications are given when individual drugs are contraindicated, limited to certain uses, or subject to international regulations. (DP-E)

10153 **Organización Panamericana de la Salud, Washington, D.C.** *Salud ambiental con posterioridad a los desastres naturales. (Environmental health after natural disasters).* Washington, D.C., Organización Panamericana de la Salud, Publicación Científica, No. 430, 1982. 60p. Span. 21 refs.

Also published in English as Environmental Health Management after Natural Disasters.

After examining the effects of various types of disasters on environmental health and health services, this book presents guidelines for correcting the conditions created by such disasters. It examines: ways of assigning priorities and establishing time-tables; steps that should be taken before the disaster, such as the development of an operations plan of emergency measures to be taken to restore essential services (water, electricity, food supply, etc.); measures to be put in practice during and immediately after the disaster, including disease control, requesting and distributing aid, and housing displaced persons; and rehabilitation, restoration of essential services, and evaluation of the operations plan. Appendices contain instructions for preparing an environmental health operations plan, suggestions on the use of various disinfectants during emergency situations, an outline of emergency environmental health measures, and a bibliography. (RMB)

10154 **Parry, E.H.** *Principles of medicine in Africa.* Oxford, UK, Oxford University Press, 1977. 604p. Engl. Refs.

This book was written in order to fulfill the need for a textbook on the principles of medicine that accurately reflects the pattern of disease and health priorities in Africa. In addition to the various systems (blood, gut, skin, central nervous system, etc.), groups of diseases (communicable diseases, mental diseases, cancer, etc.), conditions (pregnancy), and medical emergencies (especially those requiring blood transfusions), the book also considers the ecology of disease and the problems of medicine in rapidly changing societies. Although primarily intended for medical students, its straightforward style and readability make it accessible to practicing physicians and other members of the health team alike. (HC-L)

10155 **Petit, P.L.** *Management schedules for dispensaries; a manual for rural health workers.* Nairobi, African Medical and Research Foundation, Rural Health Series, No. 10, 1979. 1v.(various pagings). Engl.

This manual for rural health workers in Tanzania shows in simple terms how in most cases of illness a diagnosis

can be made and therapy (or advice for referral to a hospital) can be given by health workers with limited knowledge. It could, with a few amendments, be used with success in other parts of the developing world. Alphabetical indices are provided for conditions and for drugs. (DP-E)

10156 **Ree, G.H., Clezy, J.K.** *Simple guide to fluid balance.* Tropical Doctor (London), 12(1), Oct 1982, 155-161. Engl.

This paper provides a simple guide to fluid balance for doctors working in tropical hospitals with limited facilities, concentrating on the bedside management of fluid balance. After an examination of related physiology, the clinical assessment of water-electrolyte balance is discussed. A list of helpful investigations is given. A section on management considers fluid replacement, acidosis, surgical patients, complications of fluid therapy, and adjuncts to management. (DP-E)

10157 **Reinert, P.** *Otites. (Otitis).* Développement et Santé (Paris), 41, Oct 1982, 16-18. Fren.

This illustrated paper looks at a common childhood infection, otitis, which is often benign but which, if neglected, can cause complications, e.g. meningitis or deafness. Symptoms and treatment of acute and chronic middle ear infection (otitis media) and chronic otitis are described. (EB)

10158 **Rodger, F.C.** *Eye disease in the tropics; a practical textbook for developing countries.* Edinburgh, Churchill Livingstone, Medicine in the Tropics Series, 1981. 127p. Engl. Refs.

This textbook-cum-handbook is intended for physicians with or without opthalmological experience practicing in remote areas, for medical students, and for teachers of nurses and paramedics. It aims to present, as shortly but as comprehensively as possible, accounts of those eye diseases of greatest importance and most common occurrence in tropical countries. Included is practical information for the expatriate doctor arriving in a developing region, advice on instruments and medicines to take, and instructions on how to set up a small diagnostic laboratory. There are photographs, illustrations, and an index. (DP-E)

10159 **Simpson, D.I.** *Marburg and ebola virus infections: a guide for their diagnosis, management, and control.* Geneva, WHO, WHO Offset Publication, No. 36, 1977. 28p. Engl.

WHO, which operates an emergency aid scheme to provide personnel and equipment for assistance in outbreaks of haemorrhagic fever of suspected viral origin, has prepared these guidelines to help health planners and practitioners cope with Marburg and Ebola virus infections (two similar, virulent, and extremely infectious diseases of obscure origin). Separate sections cover their history and epidemiology, infectious agents, diagnosis, isolation of the patient, clinical management, specific treatment, epidemiological investigations and containment measures, evacuation of patients and creation of treatment centres in suspected endemic areas, international movement of patients, and immunization. (DP-E)

10160 **Sommer, A., McLaren, D.S., Olson, J.A.** International Vitamin A Consultative Group, Washington, D.C. *Guidelines for the eradication of vitamin A deficiency and xerophthalmia.* Washington, D.C., International Vitamin A Consultative Group, 1976. 1v.(various pagings). Engl.
International Vitamin A Consultative Group Meeting, Port-au-Prince, Haiti, 23-25 Mar 1976.

Written to assist teams in designing effective eradication and control programmes in avitaminosis A regions, these guidelines consider the following: (1) assessment of vitamin A status (data collection, clinical and biochemical surveys); (2) selection of intervention strategies, e.g. massive dosing, horticultural, and nutritional approaches; (3) evaluation of selected vitamin A intervention strategies (criteria and analysis); (4) research needs in present and future vitamin A programmes in terms of dosing, treatment, and education; and (5) recommendations of the International Vitamin A Consultative Group concerning research and development needs, formulated at their 1976 meeting in Haiti. (EB)

10161 **Unesco, Paris.** *Self-learning and instructional modules in health education; sample modules from Asia and the Pacific; aids to programming UNICEF assistance to education.* Paris, Unesco, Education and Primary Health Care, No. 14, N.S. 116, Nov 1982. 32p. Engl.
Module Writing Workshop on Science Education in Rural Environment, New Delhi, India, Nov 1982.

The 6th of the self-learning and instructional modules for children designed at the New Delhi workshop, entitled "You and Your Surroundings", is reproduced in full as an example of the learning materials that can be prepared in this field. It covers good habits, the hygiene of different parts of the body, clothing, food, toilet habits, water, wells and ponds, suggested activities at home and at school, and a list of related vocabulary words. Ideas are presented simply, with frequent illustrations and check-lists. (DP-E)

10162 **Upanda, G., Yudkin, J., Brown, G.** *Therapeutic guidelines; a manual to assist in the rational purchase and prescription of drugs.* Nairobi, African Medical and Research Foundation, 1980. 167p. Engl.

Intended for physicians, medical students, and senior medical assistants, this handbook provides a quick reference to the drugs available for treating a particular condition along with information on dosage, routes of administration, indications, contraindications, and relative cost. Titles refer to the general condition (e.g. antibacterial agents) and subtitles to the specific (brucellosis, typhoid fever, etc.); additional chapters cover 'vitamins, blood, and fluids' and anaesthetic drugs. Drug and disease indexes are included. (HC-L)

10163 **Voigt, L.A.** *Health-worker training course.* Contact (Geneva), (78), Apr 1984, 1-12. Engl. Also available in French in Contact, (69), May 1984, 1-13.

The present issue of Contact is a condensed version of Ann Voigt's manual and presents a step-by-step method of teaching technical skills and knowledge to community health personnel. It contains exercises, checklists, and drawings and deals with on-the-job training and formal training classes. Among the topics covered are equipment, presentation, motivation, feedback, and evaluation. Real-life anecdotes are used to illustrate appropriate teaching methods and ways of involving the students and community. (EB)

10164 **Wakeford, R.E.** *Teaching for effective learning; a short guide for teachers of health auxiliaries.* Geneva, WHO, Reference Materials for Health Auxiliaries Project (REMAHA) Pedagogical Booklet, 1974. Engl.

This short illustrated guide, prepared for WHO, aims at giving practical advice to teachers of health auxiliaries concerning the effective use of available teaching aids, the production of improved educational materials, and techniques to help students learn more effectively. It presents some samples of different types of test questions and discusses ways of preparing and delivering presentations by using specific aids such as projectors and holding group discussions. (EB)

10165 **Werner, D., Bower, B.** *Helping health workers learn; a book of methods, aids, and ideas for instructors at the village level.* Palo Alto, Cal., Hesperian Foundation, 1982. lv.(various pagings). Engl.

This copiously-illustrated manual/reference book is addressed mainly to instructors of village health workers but would also be of use to anyone involved in community education. The 1st part discusses approaches and plans, with particular emphasis on moving away from the authoritarian and paternalistic toward a humanitarian and democratic style of teaching. The 2nd part presents many ideas on making and using teaching aids and includes chapters on distinguishing between appropriate and inappropriate technologies, step-by-step problem-solving, and learning to use medicines sensibly. The 3rd discusses using the book Where There Is No Doctor and the guides, charts, and record sheets contained therein. The 4th covers maternal and child health activities, including the politics of family planning and the concept of children as health workers. The 5th examines health in relation to food, land, and social problems. The book is unique in that it stresses the dynamic nature of health education, makes practical sense of the notion of community participation, and does not shrink from pointing out the political nature of poverty, malnutrition, and ill health. It is based on the authors' experience in Mexico but includes methods and suggestions from some 35 countries on five continents. (HC-L)

10166 **WHO, Geneva.** *Use of essential drugs; report of a WHO Expert Committee.* Geneva, WHO, Technical Report Series, No. 685, 1983. 46p. Engl.

Separate sections of this report cover guidelines for establishing a national programme for essential drugs and for selecting pharmaceutical dosage forms, criteria for selecting essential drugs, updating lists, providing information, quality control, research and development, specialized applications of the essential-drugs concept, a revised model list with associated changes, essential drugs and primary health care (selection factors, a model list, and training material), and a glossary of terms. The revised list contains the names of the selected drugs, acceptable alternatives, and their routes of administration, dosage forms, and strengths, all grouped by types. (DP-E)

10167 **WHO, Geneva.** *Diarrhoeal diseases control; examples of health education materials.* Geneva, WHO, 1982. 56p. Engl.

These examples of health education materials used to combat diarrhea are taken from all over the world. They include posters, flash cards, leaflets, newsletters and comics, and slide sets in the general areas of clinical management, maternal and child care, water supply and sanitation, epidemic control, and treatment and prevention. In addition to materials in Spanish, Bangladeshi, English, Indonesian, French, Arabic, Russian, Chinese, and Nepalese, there are completely pictoral presentations aimed at illiterate audiences. Suggestions are given for developing health education materials. (DP-E)

10168 **WHO, Geneva.** *Managerial process for national health development; guiding principles for use in support of strategies for health for all by the year 2000.* Geneva, WHO, Health for All Series, No. 5, 1981. 61p. Engl.

After identifying nine components common to the managerial process for national health development in most countries, this paper outlines a process that incorporates these components and describes their interrelationships and the mechanisms required to provide continuity. Suggestions are also offered on how national strategies and plans of action for attaining health for all should lead to well-defined, country-wide programmes and organized health systems to deliver them, based on primary health care and an appropriate referral process for providing more complex services and support. Separate chapters cover mechanisms for ensuring continuity, policy formulation, broad and detailed programming, budgeting, the master plan of action, implementation, evaluation, reprogramming, and information support. (DP-E)

10169 **WHO, Geneva.** *Guide to leprosy control.* Geneva, WHO, 1980. 97p. Engl. 57 refs.

This WHO guide to leprosy control has been in use (and updated several times) since 1959; this is the latest revision. Topics covered include: the extent of the problem; diagnosis, classifications, and treatment; technical policy; leprosy control projects and their likely results; medi-

cal, social, legal, and health measures; training; programming and management; and research. Annexes deal with technical matters of treatment, diagnosis, and recording. There is also an index. (DP-E)

10170 **Wood, E.** *Community health worker's manual.* Nairobi, African Medical and Research Foundation, 1982. 328p. Engl.

This training manual/handbook is intended for community health workers in the Sudan. The book covers community development, hygiene, maternal and child health, nutrition, first aid, diagnosis and treatment of common complaints, diseases for referral, etc. Appendices include instructions for taking temperature and giving injections; some basic notions of anatomy; a table of medicines, their uses and dosages; instructions for building a concrete slab for a latrine; and a section on the importance of breast-feeding. The information is broken down into easily comprehensible bits and clearly presented and illustrated by means of more than 500 line drawings. (HC-L)

IV.9.2 Family Planning and Midwifery

10171 **Cousineau, L.** *Compagnon de l'agent de santé. (Health workers' companion).* Chestnut Hill, Mass., Pathfinder Fund, 1981. 282p. Fren. Refs.

Based on the works of authorities in the field, this handbook is intended to help experienced auxiliary health workers in Cameroon to deepen their understanding of and improve their skills in the following areas of maternal and child health: prenatal care, major and minor complications of pregnancy, normal delivery, postpartum complications (haemorrhage and retained placenta), care and evaluation of the newborn, postnatal consultation (including breast-feeding education), family planning, sex education, pediatric emergencies, laboratory examinations that can be performed by auxiliaries, sterilization procedures (equipment), and notes on working methods. The information is clearly and simply presented and accompanied by line drawings where appropriate. (HC-L)

10172 **Haupt, A., Kane, T.T.** *Population Reference Bureau's population handbook, international edition; a quick guide to population dynamics for journalists, policymakers, teachers, students, and other people interested in people.* Washington, D.C., Population Reference Bureau, 1980. 76p. Engl.

Also published in French, Spanish, and Arabic.

This handbook begins with a glossary of population terms and continues with a general discussion about population. It is divided into chapters on age and sex composition, fertility, mortality, morbidity, nuptuality, migration, urbanization and distribution, and population change. There are copious charts. A trilingual thesaurus of demographic terms and a list of population information sources form the concluding sections. (DVK)

10173 **Hufschmid, P., Sevil, H.T.** *Manual for midwives: the Turkish experience.* World Health Forum (Geneva), 3(2), 1982, 236-238. Engl.

To correct some of the faults in the training of midwives, who form the backbone of the national health service, the Turkish government encouraged the drafting and publishing of midwifery manuals on maternal and child health care. The preparation, production, and distribution of these manuals are discussed as well as issues such as style, cost, and contents. (DP-E)

V Formal Evaluative Studies

V.1 Health Workers

See also: 10115, 10124, 10276.

10174 **Brooks, E.F., Bernstein, J.D., DeFriese, G.H., Graham, R.M.** *New health practitioners in rural satellite health centers: the past and future.* Journal of Community Health (New York), 6(4), Summer 1981, 246-256. Engl.

Data from a 1975 and a follow-up 1979 survey of 44 rural USA health centres staffed by new health practitioners (NHPs) are compared to determine what changes had taken place in these centres during this period when the number of physicians in the country greatly increased. Eight of the clinics had closed, 12 had converted to having physicians on staff, while 24 had grown in staff and budget but had experienced less growth than the 12 physician-staffed clinics. The effect on NHP-staffed clinics of the rapidly increasing supply of physicians and their potential value in health care delivery to rural areas are discussed. Statistical data are included. (Modified journal abstract)

10175 **Drew, D., Bauhaus, M.** *Effective deployment of refugee health workers in epidemic measles.* Tropical Doctor (London), 12(3), Jul 1982, 132-133. Engl.

In a Thai refugee camp of approximately 5 500, refugee workers were provided with 1 week of theoretical training and in-service training to staff a 16-bed hospital, frequently in the absense of supervisory personnel. At the onset of a measles epidemic in 1978, the auxiliaries were taught to recognize the dangerous complications of the disease and to apply a standard treatment schedule. During the epidemic, only two patients out of 120 died and it is concluded that minimally-trained health workers, virtually unsupervised but following quite definite instructions, proved beyond doubt their effectiveness in containing morbidity and mortality from the disease. The entire camp population aged less than 5 years was vaccinated against measles the following year at half the cost of treating the epidemic. (HC-L)

10176 **Engel, G.V.** *Evaluation of the continued viability of the occupation of the physician's assistant.* Journal of Medical Education (Chicago, Ill.), 56(8), Aug 1981, 659-662. Engl. 9 refs.

Practicing physician's assistants in California (USA) were surveyed by a mail questionnaire as part of a three-stage longitudinal study. The findings from this investigation support the continued viability of the occupation of the physician's assistant. It appears that most physician's assistants are satisfied with their working conditions and will probably continue to remain in the field. (Modified journal abstract)

10177 **Garrett, N.R., Ada, V.** *Infant feeding, beliefs and practices: a study of Cameroonian health care personnel.* Journal of Tropical Pediatrics (Oxford, UK), 28(4), Aug 1982, 209-215. Engl. 22 refs.

The association between personal infant feeding practices and beliefs and related professional advice given to mothers was studied in 123 health and social service personnel in three urban centres of Cameroon. The results are discussed and presented as statistical data. Breast-feeding exclusively was related negatively to higher education and birth order and positively to older age. Most mothers breast-fed for the welfare of the child but only 10% of health personnel advised breast-feeding when first asked for advice. Only 4% of children were entirely bottle-fed. Mother's employment and insufficient breast milk were the most common reasons for bottle-feeding. One brand of baby food was recommended 59% of the time; advice on preparation was verbal rather than practical. These findings may be useful for design of training curricula and analysis of policies for baby food importation. (Modified journal abstract)

10178 **Goldberg, G.A., Jolly, D.M., Hosek, S., Chu, D.S.** *Physician's extenders' performance in Air Force clinics.* Medical Care (Philadelphia, Pa.), 19(9), Sep 1981, 951-964. Engl. 22 refs.

The authors evaluate the quality of care of physician extenders (PEs) — 23 physician's assistants and 7 primary care nurse practitioners — in US Air Force primary medicine clinics where they are assuming a considerable portion of the care formerly provided by physicians in the military medical system. Physician's assistants performed at least as well as physicians on 25 out of 28 non-redundant process-of-care criteria; nurse practitioners met the physicians' standard on 14 of 19 criteria. The two PE groups' performances were not significantly different. These and other findings suggest that the Air Force can deliver a high quality of care when PEs rather than physicians are used. Statistical data are included. (Modified journal abstract)

10179 **Lomas, J., Stoddart, G.L.** *Estimates of the potential impact of nurse practitioners on future requirements for general practitioners.* Hamilton, Ont., McMaster University, Faculty of Social Sciences, Program for Quantitative Studies in Economics and Population, QSEP Research Report, No. 48, Aug 1982. 34p. Engl. 49 refs.

The possible effects of increased use of nurse practitioners on future medical manpower requirements in the province of Ontario, Canada, are considered. After examining such factors as the role of the nurse practitioner and physician time spent in office visits and in supervision, the author concludes that, in 1980, at least 20%-30% (1 000-1 600) of Ontario physicians could have been safely replaced by nurse practitioners performing office services alone. Figures are also given for 1981, 1986, 1996, and 2001. In comparison to the findings of similar studies in Canada and the USA, the authors conclude that their estimates are extremely conservative. (DP-E)

10180 **Naisho, J.** *Health care for women in the Sudan.* World Health Forum (Geneva), 3(2), 1982, 164-165. Engl.

Although Sudan's new health care delivery system, based on primary care units designed to serve approximately 4 000 people each, is intended to reach 85% of the rural population, it still faces several problems, especially in terms of providing adequate treatment for women. For a number of cultural reasons, all of the community health workers selected so far have been men whom, also for cultural reasons, women refuse to consult. In addition, there is a lack of trust between workers and patients, many of whom prefer traditional practitioners. A list of seven suggestions for improving the situation is presented. (DP-E)

10181 **Ramsay, J.A., McKenzie, J.K., Fish, D.G.** *Physicians and nurse practitioners: do they provide equivalent health care?* American Journal of Public Health (Washington, D.C.), 72(1), Jan 1982, 55-57. Engl. 8 refs.

In Winnipeg, Canada, data from 40 patients attending a hypertension clinic staffed by physicians were compared to data from 40 patients attending a hypertension clinic staffed by nurses over a period of 15 months. Nurses appeared to have more success in handling obesity and to achieve somewhat better control of hypertension. The attrition rate (averaging 50%) was particularly high in patients not receiving medication in the physicians' clinic. There were no differences in appointment-keeping. (Modified journal abstract)

10182 **Smith, R.** *St George's University School of Medicine, Grenada: benefit or liability?* British Medical Journal (London), 285, 24 Jul 1982, 276-277. Engl.

Although ostensibly founded to educate medical students from developing countries, in January 1981 Grenada's St. George's University School of Medicine had an enrolment that was 91.6% from the developed world (mainly the USA). Tuition and living expenses, which come to US$75 000 for the whole course, discourage Third World participation, although academic standards are apparently high and graduates score well in qualifiying examinations in the UK and the USA. An attempt is made to assess the effect of allowing these students to receive their residency training within the UK's National Health Service. (DP-E)

10183 **Soong, F.S.** *Aboriginal health workers in Australia.* World Health Forum (Geneva), 3(2), 1982, 166-169. Engl.

Eight years' experience in training and using Aboriginal health workers in Australia has demonstrated the efficacy of this means of meeting primary needs, reducing dependence on services provided by outside authorities and professionals, and involving the people in their own health care. Their training programme, which concentrates on basic medical care, personal health care, community health action, and health services management, is briefly described. The results of a 1979 evaluation of the role of the Aboriginal health worker are discussed. (DP-E)

10184 **UNDP, New York.** *Human resource development for primary health care.* New York, UNDP, Evaluation Study, No. 9, Dec 1983. 46p. Engl.

A UNDP study team visited the Ministries of Health of Nepal, Turkey, Malawi, Benin, Egypt, and the Dominican Republic to evaluate some of the major problems and strategies of primary health care (PHC) systems operating in developing countries. This report assesses the findings of the study. It identifies, analyzes, and offers some possible solutions for many of the problems that affect the staffing, structures, and services of these PHC systems. In particular, it looks at health manpower, PHC programmes, their implementation and external support, and some underlying issues. A number of recommendations for strengthening human resource development for PHC through external support are put forward. (EB)

10185 **Vila González, E., Camacho Castillano, E.M.** *Consideraciones sobre la evaluación de la eficiencia en la educación médica. (Considering efficiency evaluation in medical education).* Revista Cubana de Administración de Salud (Havana), 8(2), Apr-Jun 1982, 179-187. Span.

Issues related to the efficiency of medical training are examined in this article, keeping in mind the possibility for scientific evaluation of such training in a number of Latin American countries. Factors that influence the training and curricula of physicians are examined and means for evaluating them within specific socioeconomic contexts are outlined. (Modified journal abstract)

V.2 Organization and Administration

See also: 10064, 10099, 10285.

10186 **Acuña, D., Ferrer, X., Gálvez, R., Majica, L., Maureira, L.M.** *Tuberculosis pulmonar: tiempo*

transcurrido entre el inicio de los síntomas respiratorios y el tratamiento. (Pulmonary tuberculosis: interval between the onset of symptoms and the iniation of therapy). Revista Médica de Chile (Santiago), 109(7), Jul 1981, 628-633. Span. 9 refs.

The interval between the onset of symptoms and the diagnosis and initiation of therapy was studied with respect to 58 new cases of pulmonary tuberculosis seen in a clinic in north Santiago and 68 seen in a clinic in south Santiago, Chile. The results revealed some interesting discrepancies between the two clinics: patients attending the southern clinic tended to seek help earlier (33% in the north as opposed to 62% in the south sought help within a month of the onset of symptoms) but northern patients tended to be diagnosed more quickly (47% of northern as opposed to only 19% of southern patients were diagnosed within 1-4 days of 1st consultation) and to initiate treatment sooner than those in the south. The implications of these findings are discussed and presented as statistical data; it is concluded that the methodology used is a valid means of assessing the operational effectiveness of tuberculosis control. (HC-L)

10187 Akpovi, S.U., Johnson, D.C., Brieger, W.R. *Guinea worm control: testing the efficacy of health education in primary care.* International Journal of Health Education (Geneva), 24(4), 1981, 229-237. Engl. Refs.

This article describes an experimental health education and primary care programme begun in June 1980 in several small farming villages in western Nigeria, with special emphasis on the programme's effect on guinea worm disease control efforts. The programme is evaluated in terms of short-term effects on health knowledge and attitudes, intermediate behavioural results, and its long-term impact on health status. The implications of organizational and technological limitations are also considered and future plans outlined. (DP-E)

10188 All-India Institute of Medical Sciences, Integrated Child Development Services, New Delhi. *Coordinated approach to children's health in India: progress report after five years (1975-1980).* Lancet (London), 15 Jan 1983, 109-111. Engl.

The success of an experiment in a coordinated approach to children's health care in 33 community blocks in India led to its expansion to a national programme covering 150 community blocks by 1980. The Integrated Child Development Services scheme has also been successful as a national programme and its further expansion is planned. Acceptance of immunization and nutrition intervention schemes and improvement in nutritional status were significantly higher in the community served through the integrated approach than in the community receiving health services separately. The services had a more favourable impact in the 1st year than in the 4th year. Statistical data are included. (Modified journal abstract)

10189 Arnade-Pastor, J., Kovasy, J.P., Menchú, M.T. *Evaluación operacional de un proyecto de vigilancia alimentario-nutricional. (Operational evaluation of a nutrition surveillance programme).* Archivos Latinoamericanos de Nutrición (Caracas), 31(3), Sep 1981, 439-459. Span. 8 refs.

Various food- and nutrition-related institutions in Honduras have cooperated in the implementation of a nutrition surveillance project called SVAN (*Sistema de Vigilancia Alimentario-Nutricional*) in the department of El Paraíso. The SVAN project has been evaluated in terms of objectives, procedures, strategies organization, supervision, training, equipment and materials, health indicators, activities, and resources utilized; some informal aspects, such as the integration of and communications between the various components, have been considered as well. This article presents the conclusions that were reached with regard to the projects's efficiency, costs, and applicability to other areas of the country. Statistical data are included. (Modified journal abstract)

10190 Ashraf, A., Chowdhury, S., Streefland, P. *Health, disease and health-care in rural Bangladesh.* Social Science and Medicine (Aberdeen, UK), 16(23), 1982, 2041-2054. Engl. 19 refs.

Two 3-month studies were conducted in three villages in the Tangail district of Bangladesh to examine the relationship between traditional (Ayurveda and Unani), folk, and allopathic medicines and the illness behaviour of various categories of villagers. The results are discussed and presented as statistical data. In general, it was found that traditional medicine had almost disappeared from the area, while Western medicine had become much more popular, although the extremely inefficient government facilities were patronized mainly by the poor. (Modified journal abstract)

10191 Aregbesola, S.E. *Survey of working conditions in small-scale industries in Nigeria.* Journal of Occupational Medicine (Chicago, Ill.), 23(11), Nov 1981, 775-778. Engl.

In Nigeria, the working conditions of 225 small-scale industrial premises representing nine different trades with a labour force of 1 497 were studied. The provision of drinking water, hand-washing and toilet facilities, eating places, and cloakrooms was found to be generally unsatisfactory. The indoor workers were better provided for than those working outdoors except for the provision of cloakrooms and eating places. Sanitation was found to be inversely related to the size of the firms. Ways of improving the conditions of people working in rather hazardous circumstances are discussed. Statistical data are included. (Modified journal abstract)

10192 Bus-Tovim, D., Kamba, P. *Integration of psychiatric care with primary health care.* Lancet (London), 2 Oct 1982, 757. Engl.

Following a pilot study in 1977, a national community psychiatric care programme was introduced in 1980 in Botswana, whose single 120-bed mental hospital had

become overcrowded and outdated. From their bases at strategically-located hospitals and health centres, eight psychiatric nurses travel and hold clinics with primary health care personnel, covering some 70% of the population. As a result of these activities, hospital admissions were halved in 1980 and the number of inpatients reduced from 464 in 1978 to 134. Reasons for the success of this programme are discussed. (DP-E)

10193 **Bhandari, L., Bhandari, V.** *People's participation in rural health services; a study of development of the concept.* Nursing Journal of India (New Delhi), 72(11), Nov 1981, 306-309. Engl.
After examining the internal and external factors affecting the role of the people's participation in the health sector, the authors survey the scope and impact of the different health communities appointed by Indian official agencies during the last 50 years. These include the Community Development Programme begun in 1952, the Health Survey and Development Committee (1943-1946), and the Health Survey and Planning Committee (1959-1961). (DP-E)

10194 **Bray, G., Channings, P.A.** *Rehabilitation in China: impressions and perspectives.* Journal of Rehabilitation (Washington, D.C.), Jan-Feb-Mar 1983, 56-59. Engl.
The Chinese concept of rehabilitation is historically and philosphically different from Western views. This article explores some of those differences and reflects the authors' experiences and impressions during a 1981 visit to the People's Republic of China. It focuses on the Chinese professionals, practices, resources, problems, and culture, all of which influence the rehabilitation process. The authors conclude that comprehensive rehabilitation is a new and slowly developing concept for the Chinese but one which, they hope, will be expanded to increase the quality of life for all individuals. (Modified journal abstract)

10195 **Carrasco T., R., Dinstrum S., R., Montalbo M., I., Medina L., E., Reyes O., M.** *Cold chain and the expanded program on immunization in Chile: an evaluation exercise.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(3), 1982, 261-271. Engl. 9 refs.
Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana.*
A major measles outbreak in 1980 (50 000 reported cases) in Chile, which had been participating in the WHO Expanded Program on Immunization (EPI), prompted an investigation of the cold chain — the method of storage, handling, transport, and distribution facilities responsible for ensuring vaccine potency. Its aim was to identify situations that could be corrected and to improve the technical and administrative development of the EPI. It tested the knowledge of vaccinators at local units and determined the potency of measles vaccines available at the regional and local units (78 clinics and 7 health services in metropolitan regions). Using statistical tables, this article discusses materials, methods, procedures, and results of the study. A number of recommendations are put forward. (EB)

10196 **Cassels, A.** *Drug supply in rural Nepal; Bhojpur drug scheme.* Tropical Doctor (London), 13(1), Jan 1983, 14-17. Engl.
This paper discusses some of the difficulties that arose during the 1st 12 months of the Bhojpur Drug Scheme, a plan to tackle the problem of medicine shortages in a rural area of east Nepal by the institution of a system of user charges to help meet the cost of purchasing further supplies. Income from the scheme covered only about 35% of the cost of drugs; the following factors were found to contribute to the shortfall: over-pricing, variation in prescribing habits, high hospital inpatient costs, misinterpretation of the "chronic illness" clause, and expensive drugs. The scheme's effect on health service utilization is mentioned and other possible ways of tackling the medicine shortage problems considered. (EB)

10197 **Chan, C.H., Goh, E.H.** *Management of household contacts of active pulmonary tuberculosis in Singapore.* Annals of the Academy of Medicine of Singapore (Singapore), 10(2), Apr 1981, 242-247. Engl. 9 refs.
A 1976 evaluation of Singapore's Department of Tuberculosis Control programme for household contacts of active pulmonary cases revealed that 63.4% had completed their three examinations, with a prevalence rate of 23.4:1 000, which was significantly higher than the national rate. Other aspects of the programme are described and assessed. It is recommended that screening of household contacts should be continued with contacts being screened only once and routine, repeat examinations be confined to those likely to develop active disease in the near future. Statistical data are included. (Modified journal abstract)

10198 **Chomenko, A.G.** *Epidemiologische Effektivitätskontrolle der Tuberkulosebekmpfungsmassnahmen in den experimentellen Territorien. (Epidemiological effectiveness control of anti-tuberculosis measures in the experimental territories).* Zeitschrift fur Erkrankungen der Atmongsorgane (Leipzig, Germany FR), 158(1/2), 1982, 95-100. German.
With an aim to determining the effectiveness of anti-tuberculous measures in the USSR and to considering possible changes to the control system, a programme was established in 1972 involving eight experimental territories in geographically and economically differing zones. In most territories complex X-ray examinations of the whole population (repeated 3-4 times and covering more than 90% of local inhabitants) resulted in a marked reduction of tuberculosis (TB) within 2-3 years. This article discusses the findings of intensified bacteriological diagnostic procedures and compares the situation in the beginning with that in 1979. The important indices for the assessment and evaluation of the TB situation are presented and drug therapy is outlined. (EB)

10199 **Chaudhry, V.P., Marwaha, R.K.** ***Challenges in the management of leukemia in India.*** Indian Journal of Pediatrics (Calcutta, India), 48(393), Jul-Aug 1981, 533-537. Engl. 15 refs.

Analysis of the treatment of 110 children with acute lymphocyte anaemia (ALA) from 1972-1980 in New Delhi, India, identifies problems associated with the management of the disease: hospital facilities, delay in diagnosis, drug costs and availability, compliance, and relapse rates. Each of these is briefly discussed. To improve present treatment standards, the authors suggest the establishment of a leukemia registry, the equipping of cancer hospitals or separate wards, and the collective management of all cases of ALA by specially-trained health personnel. (DP-E)

10200 **Djajasegara, W.** ***Approaches in nutrition education.*** Jakarta, Ministry of Health, n.d. 21p. Engl. 6 refs.

In his assessment of current nutritional education in Indonesia, the author examines the three components of the educational process (the production, diffusion, and utilization of nutritional knowledge) and considers the shortcomings of the system and its components. Mass media, one of a variety of activities in a series of educational approaches, has a specific role in the development of opinions, values, awareness, attitudes, and, to some extent, behaviour. Problems in the use of mass media include difficulties in linkage, structure, openness, capacity, and proximity. A number of recommendations to overcome these problems are put forward. (EB)

10201 **Ferreira Moura, N.** ***Estudo do atendimento de enfermagem institucional a crianças de 0 à 5 anos. (Study of underfives' attendance at nursing institutions).*** Revista de Saúde Pública (São Paulo), 15(4), Aug 1981, 371-378. Portuguese.

An operational evaluation of nursing services to children aged 0-5 years attending the experimental health centre of the *Escola Paulista de Medicina* in São Paulo (Brazil) was carried out from October 1977-October 1978. Some of the problems that have arisen since the establishment of the centre and patients' attitudes towards it are examined. The results of the evaluation are discussed and presented as statistical data and recommendations for improving the services are set forth. (RMB)

10202 **Flay, B.R., DiTecco, D., Schlegel, R.P.** ***Mass media in health promotion: an analysis using an extended information-processing model.*** Health Education Quarterly (New York), 7(2), Summer 1980, 127-147. Engl. 177 refs.

This paper presents a model of the attitude/behaviour change process that can serve as a guide for assessing the substantive adequacy of mass media programmes aiming to affect health behaviour. The model is examined in terms of knowledge from social psychology and communication research and its potential relevance to health promotion. Factors most likely to induce permanent attitude and behaviour change are considered; suggestions for evaluation of mass media programmes that take account of the many complex factors at work are advanced. Finally, a detailed, extended model of the communication/change process is suggested. (Modified journal abstract)

10203 **Florentino, R.F.** ***Priority research needs: community nutrition.*** Philippine Journal of Nutrition (Manila), 31(2), Apr-Jun 1978, 70-73. Engl.

This article discusses the questions which had not been addressed before and others that arose during the course of a nutrition programme begun in 1974 in the Philippines. The organization of the programme and its personnel, the methods used to identify the malnourished, and the effectiveness of the various interventions should be reviewed. Further, the integration of the programme with related developmental efforts must be kept in mind. The area of community nutrition is a fruitful one for research; in the complex environment in which the malnourished live, new questions constantly arise. (DP-E)

10204 **Florenzano, R.** ***Interconsultas psiquiátricas en un hospital general. (Psychiatric consultations in a general hospital).*** Revista Médica de Chile (Santiago), 109(7), Jul 1981, 661-667. Span. 8 refs.

One hundred patients with psychiatric symptoms seen in various departments of a general hospital in Santiago, Chile, were diagnosed by non-psychiatrists and then by a psychiatric consultation team. The two diagnoses were found to be in either total or partial agreement in approximately 65% of all cases. Over half were amenable to management by non-specialists through drug therapy; 8% required the attention of a psychiatrist during the hospital stay; 22% required psychiatric follow-up on an outpatient basis; and only one required hospitalization for the psychiatric disorder. It is therefore concluded that a psychiatric consultation service with an educational orientation can usefully extend the skills of non-psychiatrists in the domain of psychiatry without making excessive demands on the existing psychiatric facilities. The various diagnoses are tabulated and discussed. (HC-L)

10205 **Gardiner, P.** ***Note on fertility levels and patterns based on results of the Indonesian sample vital registration project 1974-1977.*** Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, n.d. 21p. Engl. 11 refs.

See also 10361.

This paper is a further note in connection with the author's in-depth analysis of the Sample Vital Registration Project carried out over a 3-year period (1974-1977) in 10 regions throughout Indonesia. Here he looks at the levels and patterns of fertility and, using 4 figures and 6 tables of data, discusses the possibility that some of the rates may understate the true situation; he also attempts to explain the existence of the variations in fertility levels and patterns. (EB)

10206 **Henderson, P.L., Bloffis, R.J.** *Comparative nutrition and health services for victims of drought and hostilities in the Ogaden: Somalia and Ethiopia, 1980-1981.* International Journal of Health Services (Farmingdale, N.Y.), 13(2), 1983, 289-306 Engl. 23 refs.

The civil chaos created by a combination of drought and hostilities in the Ogaden region of southern Ethiopia during the past 5 years has caused the majority of the indigenous, principally nomadic population to flee the area and seek refuge either in Somali refugee camps or in Ethiopian shelters for displaced persons. This paper compares the provision of basic food rations, selective feeding programmes, primary health care, and preventive health measures in the two groups. Ethiopia received relatively little foreign assistance, largely due to inadequate publicity concerning its problems. The Ethiopians nevertheless demonstrated greater efficiency in assisting their disaster victims, because operations in Somalia were hampered by political constraints. Statistical data are included. (Modified journal abstract)

10207 **Hussain, M.A., Abdullah, M., Huda, N., Ahmed, K.** *Studies on dietary survey methodology — a comparison between recall and weighing method in Bangladesh.* Bangladesh Medical Research Council Bulletin (Dacca), 6(2), 1980, 53-60. Engl. Refs.

After a preliminary survey of 72 families in two Bangladesh villages, a national survey was conducted of 623 families in 12 randomly selected villages to compare the accuracy of the weighing against recall methods of determining food consumption. The results are discussed and presented as statistical data. It was concluded that the diet in these villages is so uniform and unchanging that the recall method is just as acceptable as weighing for national surveys of this type in Bangladesh. (DP-E)

10208 **John, T.J., Pandian, R., Gadomski, A., Steinhoff, M., John, M.** *Control of poliomyelitis by pulse immunisation in Vellore, India.* British Medical Journal (London), 286, 1 Jan 1983, 31-32. Engl.

In a simple study into the control of polio, the town of Vellore (India) was divided into 16 zones and doses of oral polio vaccine given at one station in each zone after extensive publicity about the campaign. Some 62% of children received three doses of the vaccine and the incidence of polio fell dramatically over the study period. It is suggested that this method is applicable to similar communities because it is cheap, effective, and able to be extended to unimmunized communities when resources allow. (Modified journal abstract)

10209 **Judono, H.M.** *Oral contraceptive revolution; an Indonesia experience.* Jakarta, National Family Planning Coordinating Board, 1977. 16p. Engl. Ninth World Congress of Fertility and Sterility, Miami, Fla., 11-17 Apr 1977.

The achievements (1970-1976) of Indonesia's National Family Planning Programme are briefly reviewed in this paper. Examples of the approaches taken by the National Family Planning Institute are provided in the presentation of the following aspects: (a) the goals and phases of the programme, (b) programme implementation, (c) results, (d) integration of "beyond family planning" in the national development policies of the various government ministries, and (e) prospects for the future. Four tables of data are included. (EB)

10210 **Kumari, S., Mittal, S.K., Gupta, S., Mishra, S.L., Ray, D.D.** *Family welfare and child health: a reappraisal of community based postpartum programme.* Indian Pediatrics (Calcutta, India), 18(9), Sep 1981, 619-623. Engl. 9 refs.

The community extension of the postpartum programme at the Lady Hardinge Medical College, New Delhi, India, was evaluated by direct assessment of child health and the prevalence of family planning acceptors among 166 families residing in the area. The results, discussed and presented as statistical data, show that the average number of children per family was 3.5, most of the couples were not practicing family planning, many of the children aged less than 5 years were malnourished, and most of the children had not received protection from available vaccines. The authors feel that the programme must be augmented if its aims are to be achieved. (Modified journal abstract)

10211 **Lachmann, G.** *Primary health care and basic-needs orientation in developing countries.* Berlin, Germany DP, German Development Institute, 1982. 140p. Engl. 100 refs.

This study aims to consider health as a problem connected with socioeconomic development and to discuss a general framework of basic-needs orientation from which requirements to be satisfied by health policy can be deduced. The following areas are examined more closely: health policy concepts currently used by Third World countries, elements and requirements of primary health care policy, perspectives for decolonizing health (the case of Namibia), and requirements and contraints of a participatory health policy (the case of Benin). Three tables of data and a copious bibliography are included. (EB)

10212 **Lau, R., Kane, R., Berry, S., Ware, J., Roy, D.D.** *Channeling health: a review of the evaluation of televised health campaigns.* Health Education Quarterly (New York), 7(1), Spring 1980, 56-89. Engl. 75 refs.

This article reviews efforts to access the effectiveness of television programmes in changing health behaviours in the USA. The relatively limited literature to date has featured correlational studies that permitted no causal conclusions. The few experimental studies available present a mixed picture. Numerous methodologic problems beset any effort at assessment. Perhaps the greatest difficulty is putting into operation a design that permits true experimental manipulation on a relevant sample without contamination. The several methodologic prob-

lems and some potential means of surmounting them are discussed. (Modified journal abstract)

10213 **Law, C.E.** ***Managing health care in Afghanistan.*** Canadian Medical Association Journal (Ottawa), 128(2), 15 Jan 1983, 186-190. Engl.

From 1973-1979, several members of the US-based nonprofit foundation Management Sciences for Health (MSH) team worked on a programme combining modern management science and medicine in areas of Afghanistan where quality medical care was non-existent. This article describes ways in which modern analytic and management techniques were usefully applied in health service organization, e.g. increasing attendance at basic health centres by distributing food and procuring generic name drugs by competitive bidding in international markets. It is felt that such village-level health care programmes can succeed when their planners have the government's confidence, use indigenous resources, and train locals to deliver basic health care according to the native language and customs. (EB)

10214 **Lennox, C.E.** ***Action orientated antenatal card for Papua New Guinea.*** Papua New Guinea Medical Journal (Port Moresby), 24(4), Dec 1981, 280-285. Engl. 10 refs.

This study was carried out in Enga province, Papua New Guinea, to ascertain the detection rate of high-risk factors among 850 antenatal clinic attenders and to evaluate an action-oriented antenatal card. Using the conventional card, only 55% of high-risk factors were detected and correctly recorded; the rate improved to 86% when the action-oriented card was introduced. The results of the study are discussed and presented as statistical data. The new card, a sample of which is included, is recommended for use in all Papua New Guinea maternal child health facilities. (DP-E)

10215 **Lhomeau, H.** ***Expérience de santé dentaire dans l'archipel des Tuamotu-Gambier (Polynésie française); première partie: la pratique dentaire dans les iles isolées. (Dental health in the Tuamotu-Gambier archipelago (French Polynesia); first part: dental practice on isolated islands).*** Odontostomatologie Tropicale (Dakar), 5(1), Mar 1982, 7-15. Fren.

Consisting of over 80 atolls in a 1 600 km area, French Polynesia (Tuamotu Gambier Archipelago) has approximately 7 300 inhabitants scattered over 50 islands. This paper looks at dental infrastructure, the stationary and mobile dental health units in operation, and the system of dental care provision, with two tables showing geographic distribution, consultations, and advantages and disadvantages of various types of services. It is felt that much needs to be done in the area of dental hygiene and nutrition education, this requiring the collaboration of community health workers. (EB)

10216 **Maletnlema, T.N.** ***Nutrition intervention programmes in Africa, with reference to Tanzania.*** Progress in Clinical and Biological Research (New York), 77, 1981, 563-573. Engl. Refs.

After reviewing the types of nutrition intervention programmes normally applied in Africa (providing food supplements, treating nutritional diseases, nutrition education, income raising projects, and integrated programmes), the author examines some of the obstacles to these programmes. Tanzania's national food and nutrition programme is described and its history traced. The programme's achievements are presented in point form. (DP-E)

10217 **Marchione, T.J.** ***Evaluation in a Caribbean context: sociocultural factors affecting a community health aide program.*** In Santos, W., Lopes, N., Barbosa, J., Chaves, D., Valente, J., eds., Nutrition and Food Science: Present Knowledge and Utilization, Vol. 2, New York, Plenum, 1981, p.593-610. Engl.

The Jamaican Community Health Aide (CHA) Program was evaluated in 1975 in terms of effort, outcome, action theory, and priorities. The results are discussed and presented as statistical data. They confirm that CHA programmes for nutritional improvement should vary in shape and potential depending not only on the physical and environmental but also on the social structure of the countries implementing them, i.e., such village-level programmes cannot be mindlessly transferred from society to society without fundamental modification. For example, the principle of selecting trainees from the communities where they will serve may not operate properly in systems that encourage political patronage, nor will CHAs be effective if they are opposed by physicians. (DP-E)

10218 **Millard, L.F.** ***Health care in Poland: from crisis to crisis.*** International Journal of Health Services (Farmingdale, N.Y.), 12(3), 1982, 497-515. Engl. 47 refs.

This in-depth examination of health care in Poland traces the problems and developments within the health sector from 1938 to the present, focusing on ways in which the country's history and government helped shape the system. The author considers the following areas: the reorganization of the national health service in 1970, its aims and structure, reform at the provincial level, the political weakness of the ministry of health, the neglect of primary care, the maldistribution of doctors, the problems of the specialist care sector, drug and supply shortages and health administration difficulties. The fear that the current political situation will cause the existing health care system crisis to continue is expressed. (EB)

10219 **Moore, G.D.** ***Essential drugs for Kenya's rural population.*** World Health Forum (Geneva), 3(2), 1982, 196-199. Engl.

Supplying drugs to health facilities in rural Kenya represents a severe weakness in the nation's health service. A new management system involving the distribution of appropriate quantities of essential drugs in prepacked,

sealed boxes and the upgrading of rural health workers' training to achieve acceptable levels of diagnosis and treatment has greatly improved the situation. The training programme and two pilot projects undertaken to test the new system are described. A list of 40 drugs and supplies contained in the standard monthly ration kit for health centres and dispensaries is included. (DP-E)

10220 **Moye, J.D.** *Survey of health services in Surabaya municipality; book III: non-D.K.K. institutions.* Surabaya, Indonesia, Badan Penelitian dan Pengembangan Kesehatan, 1972. 1v.(various pagings). Engl.

This document provides general information including statistical data on hospitals, training schools, and health-related institutions in Surabaya municipality in Indonesia. A brief outline of the location, facilities, training activities, manpower, workload, attendance, etc., is provided on the region's five hospitals, seven training schools, the National Health Institute, the Provincial Health Laboratory, the Provincial Training Centre, and the Chest Centre. (EB)

10221 **Nitzschke, T., von Lüttwitz, D.** *Annehmbarkeit prventiver und promotiver Massnahmen eines Health Centre für die Bevölkerung. (Popular acceptance of a health centre's preventive and promotive services).* Frankfurt am Main, Germany FR, Peter D. Lang, Medizin in Entwicklungsländern Series, Vol. 10, 1981. 185p. German.

This monograph reports on the results of a 3-month investigation to determine the acceptability of the promotive and preventive services provided by the health centre in the village of Big Babanki in the northwest province of Cameroon. Acceptability in the present study is a product of the social environment of a rural population, economic constraints, and the quality of the health care offered. The situation on national, provincial, and village levels is analyzed in terms of economic, cultural, and social factors. Various aspects of the health centre, e.g. antenatal clinic, infant welfare clinic, drinking water supply, waste disposal, etc., are examined; this is followed by a discussion of factors influencing acceptability and rejection. Maps, sample questionnaires and statistical data from the survey, and a copious bibliography are included. (EB)

10222 **Pardoko, R.H., Soemartono** *Integration of family planning within the maternal and child health services; an operational study in east Java.* Surabaya, Indonesia, National Institute of Public Health, n.d. 51p. Engl.

With an aim to studying the integration of family planning into the existing maternal and child health services and other related factors in the process, data were collected from the records of five rural maternal child health/family planning centres located in five different regencies in East Java, Indonesia, and by interviewing health staff and the public. The study examined the following areas: quality of services provided, patient attitudes, cost-effectiveness of services, workload, manpower, personnel activities, and the training of indigenous midwives. Thirty-two tables of data are presented. (EB)

10223 **Parsons, L.** *Aid posts in Enga province.* Papua New Guinea Medical Journal (Port Moresby), 25(3), Sep 1982, 173-175. Engl.

During visits to 110 aid posts in Enga province in Papua New Guinea, an inspection of delivery of primary health care services was conducted by gathering information on the following: cleaniness, daily patient attendance, number of inpatients; maintenance of accurate record books; physical construction and general environment of aid posts; provision of essential drugs and supplies; existence of supportive and corrective supervision of aid post orderlies (APOs) by visiting provincial health extension officers; and the place of origin of the APO and his abiiity to provide care for tribal clans in conflict with his own. It was found that 20% of the posts were understaffed, 31% of the APOs had been in their aid post for less than 1 year, and 37.5% were working in their place of origin, with about 50% providing satisfactory service. (EB)

10224 **Pole, D., Ikeme, A.C., Pobee, J.O., Larbi, E., Williams, H.** *Mamprobi survey — a screening survey for cardiovascular disease and risk factors in Africa: methodology and validity.* Bulletin of the World Health Organization (Geneva), 57(1), 1979, 81-87. Engl.

Also published in French and Russian.

The Mamprobi Survey is a cardiovascular disease prevalence sample survey in an urban community in a suburb of Accra (Ghana). This preliminary paper describes its methodology and validity. The response rate was 73% (3 745 of 5 636 persons aged 15-64 years). The authors stress the importance of precise data for the planning of preventive and control measures. Subsequent sampling of non-respondents revealed only trivial reasons for non-attendance and only minor differences in health status, suggesting that estimates of disease prevalence by the survey were likely to be accurate. Statistical data are included. (Modified journal abstract)

10225 **Ramalingaswami, V.** *Interventions to deal with infections and malnutrition.* Progress in Clinical and Biological Research (New York), 77, 1981, 479-489. Engl. 27 refs.

After briefly highlighting three nutrition intervention programmes, namely the Imesi Project in Nigeria, the Jamkhed Project in India, and the Rural Guatemala Project, the author addresses the questions of whether nutrition and infection control programmes at the community level have a synergistic effect, whether they favourably influence morbidity and mortality, and whether improvemen.s in nutrition status result in resistance against parasitic infection. Some principles underlying successful intervention programmes include efficient use of resources, securing community participation, efficient illness and nutrition monitoring by village volunteers and mothers, developing maternal insights

regarding nutrition and illness, and the use of village-based health care agents to ensure widespread coverage of programmes. The paper includes three tables of data. (EB)

10226 **Samba, E.M.** *When the horizon brightens.* World Health (Geneva), Jan 1983, 4-7. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

A 1976 epidemiological survey of the village of Niarba, Upper Volta, revealed that 81.9% of the inhabitants had been infected by onchocerciasis. To avert the resulting exodus of villagers from the Volta River basin, WHO organized an onchocerciasis control programme that aims to attack the disease in this area by destroying the larvae of the vector, a blackfly called *Similium damnosum*. It is estimated that transmission has been interrupted in 80% of the area, which is now being resettled. A more recent survey of Niarba showed that no children born since control measures were started have been infected with onchocerciasis. (DP-E)

10227 **Sayogya** *New approaches in community nutrition programs.* Bogor, Indonesia, Bogor Agricultural University, 1975. 19p. Engl.

This paper examines some misconceptions in Indonesia's Applied Nutrition Programme (ANP) by reviewing the findings of the 1972-1973 Evaluation Study of the ANP. The author suggests ways of finding specific target groups for nutrition education, soliciting community participation, and organizing. The need is expressed for the Improved Family Nutrition programme (IFNP), which replaced the ANP in 1974, to ensure its position on increasing and diversifying food production and on nutrition education and community development and to remove the misconceptions brought about by the previous programme. (EB)

10228 **Shah, P.M., Shah, K.P.** *Community diagnosis and management of malnutrition; a realistic approach to combat malnutrition at the grass-roots level.* Food and Nutrition (Rome), 4(3/4), 1978, 2-7. Engl. 13 refs.

The Kasa Primary Health Centre, located about 130 km north of Bombay (India), serves 70 villages containing approximately 65 800 inhabitants. In order to combat malnutrition at the grass-roots level, 27 part-time social workers were recruited from their local communities and trained to identify nutrition disorders and high-risk pregnancies, distribute locally available food supplements to the needy, diagnose and manage common illnesses, and generally promote health and nutrition. Eighteen months of programme operation witnessed the improvement of 63% of the severely malnourished children and raised immunization coverage from 1.4% to 65% of the target population. This paper describes the programme in detail, attributing its achievements to community and health centre support and the enthusiasm of the part-time social workers. (HC-L)

10229 **Sidel, V.W.** *Medical care in China: equity vs modernization.* American Journal of Public Health (Washington, D.C.), 72(11), Nov 1982, 1224-1226. Engl. 8 refs.

This editorial considers the increased output of 'macroscopic' and 'microscopic' observations and analyses (by the USA and other countries) of medical and health care in the People's Republic of China by looking at some of the problems of access, language, and culture; of obtaining data for publication; and of discussing a health system that serves 20% of the world's people living under a diverse variety of ecologic, economic, social, and cultural circumstances. The question of whether China's leaders can maintain their commitment to prevention and not overlook the dangers in continuing unprecedented modernization of medical care services is addressed. (EB)

10230 **Soetopo, M.H., Soemana, R.** *Regency level hospital utilization in Indonesia.* Jakarta, Ministry of Health, 1976. 22p. Engl. 14 refs.

During June-November 1972, the Health Services Research and Development Centre in Surabaya, Indonesia, conducted a study on the utilization of several of the country's regency-level hospitals. Incorporated in the study was an analysis of variables that may influence utilization, e.g. age, sex, education, habits, religion, economic status of family, cost of services to patients, availability, and accessibility. It was found that the most common ailments treated were parasitic diseases, accidents, respiratory system diseases, and pregnancy and childbirth complications. Both population coverage and bed occupancy rate were found to be low. Financial aspects pertaining to the operational costs of regency-level hospitals are discussed. The report includes a map and 9 graphs and figures. (EB)

10231 **Strasser, T., Dondog, N., El Kholy, A., Gharagozloo, R., Kalbian, V.V.** *Community control of rheumatic fever and rheumatic heart disease: report of a WHO international cooperative project.* Bulletin of the World Health Organization (Geneva), 59(2), 1981, 285-294. Engl.
Also published in French and Russian.

By summing up the data collected and the experience gained, this report presents an overall view of a WHO-coordinated project that began in 1972 and involved seven health centres in various developing countries of Africa, America, and Asia. A total of 2 969 patients with rheumatic fever and rheumatic heart disease were registered and 5 499 follow-up forms were received at WHO headquarters in Geneva. Twelve tables of data from the study covering disease classification, prevalence, distribution, hospital admissions, etc. are presented and discussed and the positive and negative aspects of the surveillance project are considered. It is concluded that such control projects are feasible in developing countries and are of great potential benefit. (EB)

10232 **Tembo, E.P.** *Nutrition groups in Zambia.* World Health (Geneva), Dec 1982, 6-9. Engl. Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Although Zambian rural traditions stress the importance of food and healthy diet, the colonial government made no effort to combat their undermining by migration, a money economy, and other cultural changes. Voluntary nutrition groups, first started in 1972, were nevertheless so successful that their roles and legal status were codified in the 1975 Nutrition Act. By means of various fund-raising strategies such as jumble sales, flag days, television quizzes, etc., these groups strive to provide cheap foods, treat malnutrition, give nutrition education, train workers in other institutions, and improve food production. Some of their accomplishments are described. (DP-E)

10233 **Unterhalter, B.** *Health of the urban black in the South African context.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1111-1117. Engl. 27 refs.

South Africa's health care system is divided into a three-tier hierarchy with whites in the 1st tier, urban blacks in the 2nd, and rural blacks in the 3rd. The health problems of and services available to the 2nd and 3rd tiers are examined with special reference to Soweto. Although many of the most urgent problems are being addressed, there are still glaring inequalities between the health care provided to the 1st and 2nd tiers, while the 3rd tier of rural blacks is badly neglected. Statistical data are included. (DP-E)

10234 **van der Geest, S.** *Propharmacies: a problematic means of drug distribution in rural Cameroon.* Tropical Doctor (London), 13(1), Jan 1983, 9-13. Engl.

In 1968 Cameroon began experiments with propharmacies, or small government-supported drugstores, situated next to health centres and supervised by district health officers, a plan which, it was hoped, would solve the problem of drug shortages in rural health centres. This paper, focusing on the two fundamental obstacles to the efficient functioning of such propharmacies, namely mismanagement and high prices, is part of a broader medical-anthropological study carried out in southern Cameroon to gain an understanding of problems encountered in the distribution and use of Western drugs. A number of suggestions are made for improving the efficiacy of propharmacies, many of which have been forced out of business. Statistical data are included. (EB)

10235 **Watkinson, M., Watkinson, A.M.** *Impact of domiciliary glucose electrolyte solution on diarrhoeal prevalence and growth in children under five years of age in a rural west African village.* Annals of Tropical Paediatrics (Liverpool, UK), 2(1), 1982, 13-16. Engl.

In this July 1978-July 1979 study in Kantonkurda, a rural Gambian village with an easily accessible clinic, 27 children aged 3 months-5 years who received oral glucose electrolyte solution at home experienced significantly fewer episodes of diarrhea than a control group of 33 children who received this treatment only when attending the clinic. These findings are discussed and presented as statistical data. There was no significant difference in the nutritional status of the two groups. (DP-E)

10236 **Weekly Epidemiological Record, Geneva.** *Expanded programme on immunization; evaluation and immunization coverage; Indonesia/Programme élargi de vaccination; évaluation et couverture vaccinale; Indonésie.* Weekly Epidemiological Record (Geneva), 56(29), 24 Jul 1981, 227-228. Engl., Fren.

This report summarizes the results of surveys of immunization coverage performed in Indonesia in 1980. The results are discussed and presented as statistical data in tables reporting the outcome of coverage surveys, source of immunization delivery, and reasons for not receiving immunizations. (DP-E)

10237 **Weekly Epidemiological Record, Geneva.** *Expanded programme on immunization; evaluation of immunization coverage; Burma/Programme élargi de vaccination; évaluation de la couverture vaccinale; Birmanie.* Weekly Epidemiological Record (Geneva), 56(12), 27 Mar 1981, 89-90. Engl., Fren.

Immunization coverage in Rangoon City, Burma, was estimated in November 1980 by 10 trained teams of investigators in a survey of 60 randomly selected clusters of 7 children aged 12-23 months. A high acceptance rate for BCG (over 80%) was achieved by vaccinating children, mainly in hospitals and health centres, before the issue of a birth certificate. In contrast, DPT vaccination was performed mainly by a mobile team and, although nearly 75% of the population received a 1st dose, only 50% completed the course of 3 doses. (Modified journal abstract)

10238 **WHO, Brazzaville.** *Information systems for the management of national health programmes: role of programmes for 1990 — expanded programme on immunization, water supply and sanitation, malnutrition control — in achieving the objective of health for all by the year 2000; mobilization of communities for health developpement: approaches and constraints.* WHO, Brazzaville, AFRO Technical Papers, No. 19, 1984. 101p. Engl.
Thirtieth, 31st, and 32nd Sessions of the WHO Regional Committee for Africa, Brazzaville, Accra, Libreville, 20 Sep 1980, 19 Sep 1981, 18 Sep 1982.

This 3-part document consists of background papers and final reports of the three technical discussions. The 1st section examines the problems and inadequacies of information systems used in the planning, implementation, and evaluation of health programmes. Guidelines and

strategies for the development of information systems for management are presented. The subject of the 2nd part is the role of programmes for 1990 — expanded programme on immunization, water supply and sanitation, malnutrition control — in achieving the objective of health for all by the year 2000. The last section looks at a number of essential conditions for community mobilization and the measures and organizational changes needed to support local initiatives and ensure the continuity of community participation. Political, administrative, socioeconomic, and community-level constraints are examined. An address by the WHO Director-General is included. (EB)

10239 **Williamson, N.E., Parado, J.P., Maturán, E.G.** *Providing maternal and child health-family planning services to a large rural population: results of the Bohol project, Philippines.* American Journal of Public Health (Washington, D.C.), 73(1), Jan 1983, 62-71. Engl. 10 refs.

This report provides a general overview and examines the results of the Philippines Ministry of Health's 5-year (1974-1979) Bohol Maternal and Child Health-Based Family Planning Project, which operated within the public health system and involved a predominantly rural population of 425 000 south of Manila. It was intended that by emphasizing a maternal and child health approach to family planning, using paramedics (especially midwives), and evaluating low-cost preventive health strategies, this demonstration project, if proven effective and practical, could be replicated elsewhere in the country. The following aspects are discussed with the use of four tables: project objectives, role and training of midwives, maternal and child health services, family planning attitudes and behaviour, and the demographic impact of the project on fertility and mortality. A number of possibilities for improvement in the planning and delivery of such a project are put forward. (EB)

10240 **Williamson, N.E.** *Attempt to reduce infant and child mortality in Bohol, Philippines.* Studies in Family Planning (New York), 13(4), Apr 1982, 106-117. Engl. 30 refs.

This paper describes a 1975-1979 project in Bohol, the Philippines, which, despite an active maternal child health and family planning programme, failed to lead to a decline in mortality. Local mortality, demographic, and health trends are also analyzed and presented as statistical data. These reasons are given for the project's failure: health services were of inadequate quality or quantity; midwives had too many tasks; there was a lack of fit between health services and local health conditions; local health problems were intractable to current technology; resources were insufficient to provide comprehensive primary health care; the maternal child health programme was used mainly as a vehicle for family planning; too little attention was given to curative services; and maternal child health components were not designed and too short to have much impact on the large target population. A number of recommendations are put forth. (DP-E)

10241 **Williamson, N.E.** *Bohol project and its impact.* Studies in Family Planning (New York), 10(6/7), Jun-Jul 1979, 195-210. Engl.

See also entries 9217 (volume 13) and 9799 (volume 14).

Since October 1974, the northwestern half of Bohol province (population: 420 000), the Philippines, has participated in a pilot project whose aims are to improve maternal and child health (MCH) services; to introduce and improve family planning (FP) services in the context of an expanded MCH programme; to improve the MCH/FP training and supervision of health personnel (including traditional birth attendants); and to carry out operational and other studies relevant to the aforementioned objectives. This paper documents the project's progress between 1974-1978. Briefly, statistics show marked increases in vaccination coverage, deliveries managed by trained attendants, general medical care, and the use of more effective methods of family planning, but an overall demographic impact on vital rates is not yet apparent. (HC-L)

10242 **Wone, I., Lauture, H. de** *Stratégie de santé en situation de développement: stratégies des consultations; quelques aspects de la stratégie curative courante. (Health strategy in a developing region: consultation strategy; some aspects of the current curative strategy).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 335-349. Fren.

This paper presents an inventory and discussion of health services and personnel available in the relatively well-served region of Cap-Vert, Senegal (population: 1 100 000). It is noted that only 40% of the population has access to private medicine consultation, the rest availing themselves of government facilities that are ill-equipped and staffed by nurses who are often inappropriately trained and frequently discouraged. Not surprisingly, their role, which in theory includes preventive and educational activities, is limited almost exclusively to curative care. The last part of the paper describes a primary health care scheme based on community management and financing that has been implemented with success and is now serving some 100 000 persons in Pikine. (HC-L)

10243 **World Bank, Washington, D.C.** *Analyzing the impact of health services: project experiences from India, Ghana, and Thailand.* Washington, D.C., World Bank, World Bank Staff Working Papers, No. 546, 1982. 44p. Engl. 56 refs.

For evaluating health projects, four categories of indicators are pertinent: environment (socioeconomic conditions and health policies); inputs (services offered); outputs (services received); and outcomes (changes in mortality, morbidity, and nutritional status). This paper reviews what three important controlled experiments (Narangwal in India, Danfa in Ghana, and Lampang in Thailand) reveal about these indicators. The experiences of three non-experimental projects with no control groups are also reviewed. (Modified journal abstract)

10244 **Wu, Y.K., Yu, J.S., Yu, M.Z., Lu, C.Q., Gao, R.Q.** *Five-year report (1975-1979) of a cardiovascular community control program in the Shijingshan district of Beijing.* Chinese Medical Journal (Beijing), 95(3), Mar 1982, 163-166. Engl.

From 1975-1979, a community control programme aimed at hypertension, stroke, and ischemic heart disease was carried out among a mixed rural/urban population of 200 000 in the Shijingshan district, Beijing, the People's Republic of China. Surveillance was based on blood pressure surveys and registration of hypertensives, while cases were identified by screening and treated with a simple, cheap, standardized medication given once a day. Paramedical personnel provided once-a-month follow-up. Although mortality from stroke has been reduced by 23% as a result of the programme, deaths from acute myocardial infarction have increased. Statistical data are included. (Modified journal abstract)

V.3 Planning

See also: 10267.

10245 **Beland, R.G., Young, M.E.** *Strategy, cost, and progress of primary health care.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(3), 1982, 233-241. Engl. 24 refs. Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana.*

This article examines primary health care (PHC) progress in six less-developed countries with large populations, namely Cuba, the People's Republic of China, and Tanzania (which have achieved significant success in providing virtually 100% of their populations with access to and coverage by adequate quality PHC) and Nigeria, India, and Afghanistan (which have experienced considerable difficulty in their PHC provision). The author looks at economic, political, and cultural costs involved and PHC strategies adopted and relates them to the progress achieved. A number of unresolved issues are identified and tentative suggestions pending clarification of such issues are put forward. (EB)

10246 **Diallo, S., Diop Mar, I.** *Impact des principales maladies transmissibles sur le développement; prévention. (Impact of the major transmissible diseases on development; prevention).* Médecine d'Afrique Noire (Dakar), 29(7), Jul 1982, 461-469. Fren. 12 refs.

The authors consider the following: (a) the incidence rates of some of the major transmissible diseases, both viral and parasitic, common to the tropics; (b) the effect on development of diseases such as yellow fever, trypanosomiasis, and onchocerciasis; (c) the ways in which poorly-conceived projects such as construction of lakes, dams, and irrigation canals affect the incidence of malaria, schistosomiasis, and viral diseases; and (d) required methods of prevention, e.g. pest control, general sanitary improvements, vaccination, and chemoprophylaxis. (Modified journal abstract)

10247 **Diop, S., Wone, I., Adikpeto, K., Lasture, H. de** *Evaluation des actions de santé; critères d'appréciation et modalités techniques. (Evaluating health interventions; evaluation criteria and technical methods).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 353-357. Fren.

See also entry 10248.

This paper discusses the elements of evaluation in general and health services evaluation in particular and then lists a number of indicators that were chosen by a group of experts on the African region for use at the national level in evaluating health services. The indicators are grouped under four rubrics: health policy (e.g. percentage of total budget allocated to health); health services (subheadings: distribution of services, utilization of services, essential drug supplies, and environmental health promotion); health status (subheadings: vital statistics and nutrition data); and social and economic productivity (subheadings: group national product per person and adult literacy rate by sex). (HC-L)

10248 **Fauteux, J.-P., Brucker, G., Gentilini, M.** *Evaluation des actions de santé; problèmes posés par l'évaluation de la couverture effective d'une population en développement. (Evaluating health interventions; problems related to the evaluation of the effective coverage of a developing population).* Médecine d'Afrique Noire (Paris), 29(5), May 1982, 361-365. Fren.

See also entry 10247.

This paper examines the crucial elements of a primary health care system, pointing out that the evaluator of such a system must take into consideration its accessibility, appropriateness (i.e. a hospital is an inappropriate response to the problem of kwashiorkor), and efforts in the areas of preventive medicine, health education, and community development. Particularly emphasized is the idea that health workers can no longer perceive health problems in purely medical terms and must be prepared to go beyond the medical context in search of their origins and solutions. (HC-L)

10249 **Gish, O.** *Selective primary health care: old wine in new bottles.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1049-1063. Engl.

See also entry 6772 (volume 10).

After explaining the differences between the vertical and horizontal approaches to disease control activities, the author comments on a paper by Drs. J. A. Walsh and K. S. Warren, entitled 'Selective Primary Health Care: an Interim Strategy for Disease Control in Developing Countries', which offers a traditional defence of vertical programmes. In particular, he criticizes the introductory and closing remarks and the sections on establishing priorities for health care, evaluating and selecting needed interventions, comprehensive versus basic primary health care, multiple disease control measures, and selective primary care. (DP-E)

10250 **Makhoul, N.** *Agricultural research and human nutrition: a comparative analysis of Brazil, Cuba, Israel, and the United States.* International Journal of Health Services (Farmingdale, N.Y.), 13(1), 1983, 15-31. Engl. 33 refs.

This study examines the relationship between nutrition and agricultural production, with emphasis on agricultural research orientation and impact and on predominant modes of labour reproduction in the USA, Cuba, Brazil, and India. It is proposed that structural nutritional vulnerability prevails where labour power is sold below its value. In the framework of capitalist production, science is biased against subsistence food crops that are used restrictively in reproduction of labour because such crops, in this role, place a higher value on labour than on profit. (Modified journal abstract)

10251 **Mendizábal L., G., Cornejo Roselló, C.** *Extension of health service coverage in Puno, Peru.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(2), 1981, 121-130. Engl. 8 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 88(6), 1980, 489-501.

A special programme was developed to improve the health service coverage provided to the rural poor of Peru's south altiplano health region. Priority was assigned to the least-served areas, to children and pregnant women, and to the prevention of communicable diseases. Efforts were made to strengthen health facilities and to train volunteer health auxiliaries, community leaders, lay midwives, and nurse supervisors; equipment was also provided and a wide range of planning, coordinating, and other activities were carried out. A mid-1978 evaluation indicated that in 2 years health service coverage had expanded considerably and a great many health personnel had been trained and health posts equipped. Statistical data are included. (Modified journal abstract)

10252 **Peña Solís, J.** *Observaciones sobre el proyecto de decreto que crea el servicio nacional de salud. (Remarks on legislation aimed at creating a national health service).* Acta Odontológica Venezolana (Caracas), 18(3), Sep-Dec 1980, 393-398. Span.

In 1983 Venezuela's ministry of health passed a law intended to facilitate the creation of a national health service and invited each union of health workers to make appropriate comments. The author, in his capacity of judicial advisor to Venezuela's federation of schools of bioanalysts, analyzes this law from a juridical and conceptual point of view. He concludes that its defects are so serious that they almost preclude the creation of a national health service and makes suggestions for improving it. (RMB)

10253 **Pillsbury, B.L.** *Policy and evaluation perspectives on traditional health practitioners in national health care systems.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1825-1834. Engl. 30 refs.

Symposium on Traditional Health Practitioners in National Health Care Systems, Edinburgh, UK, 12-17 Apr 1981.

After much resistance by physicians and health planners to traditional practitioners, international policy has recently shifted to support their inclusion in modern-sector health care programmes. Governments in several dozen countries now utilize midwives in official health and family planning programmes but, with few exceptions, continue to resist incorporating traditional healers into the national health care system. Bureaucratic and sociological reasons for this are discussed and recommendations made for more balanced evaluation of the traditional practitioner components that have been developed in national and other health care systems. (Modified journal abstract)

10254 **Sansarricq, H.** *Kellersberger memorial lecture, 1981: the general situation of leprosy in the world.* Ethiopian Medical Journal (Addis Ababa), 20(2), 1982, 89-106. Engl.

After discussing the magnitude of the leprosy problem from the human and public health points of view, the author compares the relative importance of leprosy to that of other communicable diseases in tropical countries. The achievements of the current strategy for leprosy control are considered, with emphasis on recent problems, and future needs and prospects examined. At present, the constraints for leprosy control are seen to result mainly from inadequate infrastructure and methodologies for case detection and the severe shortcomings of dapsone monotherapy. (DP-E)

10255 **Tobias, P.V.** *Apartheid and medical education: the training of black doctors in South Africa.* International Journal of Health Services (Farmingdale, N.Y.), 13(1), 1983, 131-153. Engl. 22 refs.

Data on numbers and distribution of physicians and medical students in South Africa are presented and analyzed by ethnic group. The effect of the apartheid policy is discussed in terms of student selection and admissions, numbers of medical graduates compared to total population in the various groups, quality of premedical training and facilities, etc. It is concluded that this policy, with its many ramifications at primary, secondary, and tertiary educational levels, has constituted the most serious setback to medical education in South Africa. (Modified journal abstract)

10256 **Ugalde, A.** *Physician's control of the health sector: professional values and economic interests; findings from the Honduran health system.* Social Science and Medicine (Aberdeen, UK), 14A(5), Oct 1980, 435-444. Engl. 43 refs.

The author compares the health aims of the 1974-1978 development plan of Honduras with evidence from the field regarding their implementation and concludes that the professional values and economic interests of the physicians, who have almost total control over health decision-making, are ensuring that resources continue

to be concentrated on urban, curative, hospital services at the expense of rural and preventive programmes. Moreover, this orientation is being reinforced by international lending agencies such as the World Bank and the Interamerican Development Bank. (HC-L)

10257 **Urrutia Montoya, M.** *Alternative development strategies and their effects on national nutrition policies and plans.* Progress in Clinical and Biological Research (New York), 77, 1981, 965-972. Engl. Refs.

The impact of two development strategies — the Import Substitution Industrialization model and the Open Economy model — are analyzed with respect to nutrition planning in Colombia, Peru, Brazil, Mexico, and several Asian countries. The role of nutrition programmes in development planning is discussed and Colombia's 1975 development plan examined with emphasis on its integration of a nutrition programme coordinating with both agricultural and foreign trade policies. (DP-E)

10258 **Wallerstein, M.B.** *Impact of food aid and trade practices on LDC food and nutrition.* Progress in Clinical and Biological Research (New York), 77, 1981, 973-985. Engl. Refs.

Although food aid to developing countries has declined in recent years due to increases in prices in the international market, for many years these nations were encouraged to develop their urban and industrial sectors instead of rural and agricultural programmes. The impact of these two factors on the national economies and the individual's nutrition status in developing countries is examined. Based on projected food needs in the year 2000, implications for policy and planning are discussed. (DP-E)

10259 **White, A.T.** *Why community participation? A discussion of the arguments.* Assignment Children (Geneva), 59/60, 1982, 17-34. Engl. 17 refs.

The author defines community participation as the active involvement of the local populations in the decision-making concerning development projects or in their implementation. In his examination of 10 reasons that have been advanced in favour of participatory methods, he discusses both their application and their constraints, with particular reference to the areas of water supply and sanitation. These reasons include the following: increased accomplishment, lower costing services, intrinsic satisfaction for participants, catalyst for further development efforts, sense of responsibility gained by participants, need for project demonstrated, consulting participants on major decisions, use of indigenous knowledge and expertise, freedom from dependence on professionals, and helping people to better understand the nature of the constraints. (EB)

10260 **WHO, Geneva.** *Health programme evaluation; guiding principles for its application in the managerial process for national health development.* Geneva, WHO, Health for All Series, No. 6, 1981. 47p. Engl.

After an examination of the general purposes of the evaluation of health programmes, policies, services, and institutions, a nine-point evaluation process is described. It includes these components: specifying the subject for evaluation; ensuring information support; verifying relevance; assessing adequacy; reviewing progress; assessing efficiency, effectiveness, and impact; and drawing conclusions and formulating proposals for future action. The evaluation of the managerial process for national health development is also discussed. (DP-E)

10261 **WHO, Geneva.** *National health information systems in South-East Asia.* WHO Chronicle (Geneva), 33(5), 1979, 177-179. Engl.

Also published in French, Russian, and Spanish.

A recent review of national health information systems (NHIS) in the countries of Southeast Asia revealed weaknesses arising from the lack of a clear concept of NHIS, lack of a clear strategy and set of objectives for NHIS elaboration, and shortages of material and personnel. This paper summarizes the discussion and recommendations made at the Consultative Meeting on NHIS Development in New Delhi, December 1978, including the potential role of WHO in providing technical and methodological support for NHIS. (HC-L)

V.4 Geographical Distribution of Health Services and Workers

10262 **Annis, S.** *Physical access and utilization of health services in rural Guatemala.* Social Science and Medicine (Aberdeen, UK), 15D(4), Nov 1981, 515-523. Engl. 14 refs.

A study of the distribution and utilization of modern health facilities was undertaken with respect to a systematic sample of 188 rural communities in three highland departments in Guatemala. Ministry of health posts and centres were found to be well-located, coinciding with local and regional markets an average of 5.3 km from the communities studied. Nonetheless, the majority of their users came from less than 1 km away. Interviews with 32 persons representing 14 villages and all three departments indicated that the quality of these services, which are understaffed with poorly-training personnel and badly equipped, is responsible for their underutilization. Efforts aimed at improving existing facilities, rather than increasing their numbers or overcoming supposed cultural barriers, are called for. (HC-L)

10263 **Bravo González, J.R., Tejeiro, A.** *Distribución espacial de los profesionales de la salud; análisis de algunos indicadores demográficos. (Geographic distribution of health professionals; an analysis of some demographic indicators).* Revista Cubana de Administración de Salud (Havana), 7(4), Oct-Dec 1981, 434-449. Span.

Segundo Congreso Nacional de Administración de Salud, Cienfuegos, Cuba, 2-4 Oct 1980.

With the aid of nine tables and two graphs, this paper presents and analyzes data obtained from the national

registry of health professionals on the geographic distribution of physicians and dentists in Cuba. It is noted that the country has one physician:768 inhabitants and one dentist:3 173 inhabitants, but that these are distributed in favour of the urban centres; the 24 municipalities that contain 40% of the population also contain 70% of the physicians and 57% of the dentists. (HC-L)

10264 Joseph, A.E., Bantock, P.R. *Measuring potential physical accessibility to general practitioners in rural areas: a method and case study.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 85-90. Engl. 31 refs.

Increasingly, the general practitioner is the key element within the rural health care delivery system; however, the supply of doctors has not kept pace with the demands and accessibility to physicians has become a pressing issue in many rural areas. Following a discussion of the merits of measures of accessibility based upon utilization versus measures based upon the relative location of population and physician, a measure of potential physical accessibility is presented and applied to a Canadian data set. The results suggest that the smaller catchment populations of most rural general practitioners may partly compensate for isolation from major, urban concentrations of doctors. Statistical data are included. (Modified journal abstract)

10265 Joyce, R.E., Hunt, C.L. *Philippine nurses and the brain drain.* Social Science and Medicine (Aberdeen, UK), 16, 1982, 1223-1233. Engl. 21 refs.

The Philippines has been one of the greatest exporters of professional personnel to the USA and nurses outnumber any other category; despite some reported problems, their experience in the USA has been good. Little difference in socioeconomic background has been found in Filipino nurses who stayed in the Philippines compared to those who have spent considerable time in the USA. Nurses remaining in the USA seem to perceive few opportunities in the Philippines. The migration of Filipino nurses to the USA is increasing and will continue to do so as long as US policy permits. Statistical data are included. (Modified journal abstract)

10266 Madison, D.L., Combs, C.D. *Location patterns of recent physician settlers in rural America.* Journal of Community Health (New York), 6(4), Summer 1981, 267-274. Engl. 12 refs.

The location patterns of young physicians (the majority of whom were primary care practitioners) who settled in the most rural communities of the USA from 1973-1976 are analyzed. They tended to have studied in states with larger rural populations. Foreign medical graduates were heavily represented. The principal finding — a tendency toward further concentration of rural physicians within existing medical communities — suggests that those rural communities with the greatest needs may remain underserved without the assistance of organized external programmes. Statistical data are included. (Modified journal abstract)

10267 Okafor, S.I. *Policy and practice; the case of medical facilities in Nigeria.* Social Science and Medicine (Aberdeen, UK), 16(22), 1982, 1971-1977. Engl. 17 refs.

This in-depth discussion looks at the geographical distribution of medical facilities in Nigeria by examining the situation in Bendel State, where rural-urban imbalances in the health services are still evident despite the country's efforts to improve access to health facilities and personnel. The following aspects are considered: Nigeria's national health programmes since independence in 1960, the two-tier system of health care, factors underlying the spatial pattern of health facilities, the high doctor:patient ratio (1:70 000 in some rural areas), and the basic problems of the health care delivery system. Four tables of data are included and a number of conclusions put forward. (EB)

10268 Ramírez de Arellano, A.B. *Health "draft": compulsory health service in Puerto Rico.* Journal of Public Health Policy (Burlington, Vt.), 2(1), 1981, 70-74. Engl.

In 1978, the government of Puerto Rico passed legislation requiring all persons entering the health professions to provide services for one year in the government-owned regionalized system of health care, which serves 60% of the population. This article describes the process of distribution and assesses the impact of the legislation. After 2 years, distribution of health professionals was much more even: health care and facilities were greatly improved. However, reluctant draftees have not adapted well to their duties and there is often uncertainty as to whether a position will be filled when a recruit's term ends. (DP-E)

10269 Retief, F.P. *Opleiding van Swart geneeshere in Suid-Afrika. (Training of black doctors in South Africa).* South African Medical Journal (Cape Town), 61(7), Jun 1982, 236-239. Afrikaans. 12 refs.

Jaarvergadering van die Geneeskunde-afdeling, Suid-Afrikaanse Akademie vir Wetenskap en Kuns, Bloemfontein, South Africa, 23 Jun 1980.

This article traces the distribution and training of black doctors in the Republic of South Africa over the past 20 years and looks at some of the reasons for the present shortage of black doctors (less than 2% of a total of 15 663 doctors are black). While the number of black matriculants has increased considerably (43 000 in 1980 from 11 000 in 1970), the percentage of successful applicants has dropped markedly, this despite the creation of the Medical University of Southern Africa in 1976, an institution catering predominantly for blacks. A number of suggestions, including the establishment of additional, similar institutions, are put forward. Graphs and statistical data are included. (Modified journal abstract)

10270 Ryan, M., Prentice, R. *Spatial variations in the Soviet health service.* British Medical Journal (London), 286, 7 May 1983, 1494-1496. Engl. 2 refs.

Using data from 1950-1980, variations in the numbers of doctors, other health personnel, and hospital beds are analyzed in each of the Soviet Union's 15 geographical components. The analysis indicates that there has been no effort to equalize the distribution of these health resources or to favour rural areas where they were already in short supply, a situation which is held to be in direct contradiction to the USSR's allegedly egalitarian policies. Statistical data are included. (DP-E)

10271 **van der Geest, S.** *Efficiency of inefficiency; medicine distribution in south Cameroon.* Social Science and Medicine (Aberdeen, UK), 16(24), 1982, 2145-2153. Engl. 24 refs.

This paper, part of a broader study of the distribution of Western medicines in Cameroon, describes and discusses the problems of drug distribution in the widest possible context, including such factors as kinship, economics, politics, cognition, and traditional medicine. The root cause of these problems is believed to be corruption resulting from ingrained social and cultural practices and prevailing economic conditions, so that medicines intended for the public are distributed and consumed (generally by health workers and their friends and families) privately. The author suggests that selling low-cost drugs, rather than the present system of supposedly free distribution of expensive drugs, might provide a partial solution. (DP-E)

V.5 Financial Aspects

10272 **Belcher, D.W., Nicholas, D.D., Ofosu-Amaah, S., Kratzer, J.H.** *Comparison of methods for estimating the frequency of paralytic poliomyelitis in developing countries.* Bulletin of the World Health Organization (Geneva), 57(2), 1979, 301-307. Engl. 11 refs.

Also published in French and Russian.

Three survey methods for estimating the prevalence of lameness due to poliomyelitis were compared in the Danfa Health Project district of rural Ghana. A postal survey of school headteachers was the least costly and the most accurate; it is recommended for countries with an extensive network of primary schools. Medical examination in a village health survey was relatively expensive but is justifiable if the survey is multipurpose. A question added to the annual district census was quite inexpensive and could be very useful with more careful questioning. Repeated surveys can be used to assess the success of poliomyelitis vaccination programmes. Statistical data are included. (Modified journal abstract)

10273 **Consignado, L.S.** *Keeping watch on the water.* World Health (Geneva), Feb-Mar 1982, 8-10. Engl.

The effects of a piped water supply on the lives of the inhabitants of Barrio Emmanuel and Talaga, the Philippines, are briefly described. Nine local residents were elected to the board of the water cooperative of the former neighbourhood; their main function is to ensure the collection of the water users' monthly dues of US$2.75, which are used to maintain the water system and repay the government loan of US$12 000 borrowed to build it (originally part of a grant from US AID). In Talaga, users of the water supply contribute US$3.12 monthly towards a loan of US$32 000. (DP-E)

10274 **Creese, A.L., Sriyabhaya, N., Casabal, G., Wiseso, G.** *Cost-effectiveness appraisal of immunization programmes.* Bulletin of the World Health Organization (Geneva), 60(4), 1982, 621-632. Engl. 19 refs.

This paper describes a cost-effectiveness analysis of the immunization programmes of Indonesia, the Philippines, and Thailand, using the programme costing guidelines developed for the WHO Expanded Programme on Immunization (EPI). Programme organization is outlined and costs are assessed at US$2.86, US$4.97, and US$10.73, respectively. The implications of this preliminary analysis are considered for each country and common managerial issues detailed. Programme organization, health care input costs, and population accessibility are considered as explanations of the observed differences in immunization costs. The feasibility of undertaking routine cost-effectiveness monitoring of immunization and other primary health care programmes is considered. Statistical data are included. (Modified journal abstract)

10275 **Cubas Manrique, J., Ledo Duarte, S.** *Aspectos económicos de la salud pública. (Economic aspects of public health).* Revista Cubana de Administración de Salud (Havana), 7(4), Oct-Dec 1981, 347-355. Span.

Segundo Congreso Nacional de Administración de Salud, Cienfuegos, Cuba, 2-4 Oct 1980.

This paper identifies and briefly discusses the following aspects of the relationship between public health and the economy in Cuba: the influence of economic development on public health; the influence of public health on economic development; the efficiency (cost-benefit) of the public health system from a social, medical, and economic point of view; and the efficiency of public health institutions. Examples of indicators of each aspects are mentioned. (HC-L)

10276 **Denton, F.T., Gafni, A., Spencer, B.G., Stoddart, G.L.** *Potential savings from the adoption of nurse practitioner technology in the Canadian health care system.* Hamilton, Ont., McMaster University, Faculty of Social Sciences, Program for Quantitative Studies in Economics and Population, QSEP Research Report, No. 45, Jul 1982. 40p. Engl. 45 refs.

An investigation is reported of the potential for reducing aggregate medical costs by the introduction of nurse practitioners into the Canadian health care system to an extent consistent with demonstrated safety and effectiveness. A cost model is developed for this purpose and estimates of its parameters are provided. The cost model is coupled with a demographic projection model and

potential cost reductions are simulated over the period 1980-2050, under alternative assumptions. Results suggest that savings could have been 10%-15% in 1980 for medical services as a whole and 16%-24% for ambulatory services. Copious statistical data are included. (Modified journal abstract)

10277 **Gish, O.** *Economic dependency, health services, and health: the case of Lesotho.* Journal of Health Politics, Policy and Law (Durham, NC), 6(4), Winter 1982, 762-779. Engl. Refs.

This article is concerned with two factors affecting the health status of the people of Lesotho: 1) the nation's function as a reserve labour economy (for South Africa) and 2) the health care system (its size, composition, accessibility, and efficiency). The author concludes that any substantive solutions in these problems will be found primarily in the wider southern Africa setting and not within the context of small, dependent national states. At the same time, these states must make development decisions considering existing geopolitical realities. For Lesotho, the decisions made on the issues raised in this article can have an immediate as well as a long-term effect on health. (Modified journal abstract)

10278 **Glucksberg, H., Singer, J.** *Multinational drug companies in Zaire: their adverse effect on cost and availability of essential drugs.* International Journal of Health Services (Farmingdale, N.Y.), 12(3), 1982, 381-387. Engl. 24 refs.

This analysis of the types and costs of drugs imported by seven multinational pharmaceutical companies in Zaire reveals that 75% of these drugs consisted of expensive and non-essential items. The prices of essential drugs (24% of total imports) were much higher (an average 300%) than those of available generic sources. Both these factors exacerbate the scarcity of needed items because of Zaire's limited capital. In addition, two drug firms have imported and promoted the sale of several potentially lethal drugs. Thus, in Zaire, the multinational pharmaceutical industry has an adverse effect on the availability and cost of drugs, as well as on the pattern of drug usage. Statistical data are included. (Modified journal abstract)

10279 **Heller, T.** *Poor health, rich profits; multinational drug companies and the Third World.* Nottingham, UK, Bertrand Russell Peace Foundation, 1977. 76p. Engl. 71 refs.

This book attempts to describe the present structure of the international pharmaceutical industry as it relates to developing countries. The author presents a distillation of evidence that suggests that no real distinctions should be drawn between the functions of these companies in the developed and developing countries and that their striving for growth and gain is frequently at the expense of entire countries and the majority of the people in whatever country they operate. He examines the dubious and often counter-productive nature of their 'transfer of technology', the intensive advertising techniques used in all countries, and the ways certain countries are attempting to impose controls over the industry as now organized. Some statistical data are included. (Modified journal abstract)

10280 **Mahieu, M.** *Benefit-cost analysis of measles vaccinations in Yaounde, Cameroon.* Ann Arbor, Mich., University of Michigan, Center for Research on Economic Development, Discussion Paper No. 96, Nov 1981. 20p. Engl. Refs.

This paper discusses the issues involved in the application of cost-benefit analysis to health programmes and suggests some new approaches. The method developed is applied to the case of measles vaccinations given in Yaoundé, Cameroon, from 1971-1976. The results show that high cost-benefit ratios are obtained under the most conservative assumptions. Further, it is shown that giving more vaccinations could have earned an even greater return. An epidemiological model is used to find spillover benefits to vaccinations, while a herd immunity level of 59% of those aged 6-26 months is found. Statistical data are included. (Modified journal abstract)

10281 **Omawale, Rodrigues, A.** *Agricultural credit related to nutrition and national development in the Caribbean: a study of the Guyana Agricultural Cooperative Development Bank.* Tropical Agriculture (Surrey, UK), 56(1), 1979, 1-9. Engl.

The pattern of loans granted by the Guyana Agricultural Cooperative Development Bank was analyzed for nutrition and national development implications. The results, discussed and presented as statistical data, suggest that traditional banking criteria were applied to the general disadvantage of the most needy groups. This is viewed in the context of evidence from other countries, which suggests that welfare objectives need not conflict with the goal of increased production. An integrated approach to regional development is seen as indispensable. This would permit a change in the lending pattern to one that might benefit small farmers who are also most at risk of malnutrition. (Modified journal abstract)

10282 **Parkinson, R., Wait, C., Welland, C., Vest, D.A.** *Cost analysis of minor ailments in rural Swaziland.* Tropical Doctor (London), 13(1), Jan 1983, 38-40. Engl.

With an aim to estimating the cost of outpatient visits in the rural area of Siteki, Swaziland, the authors collected data from three sources of treatment for minor ailments, namely government clinics, hospital primary care nurses, and hospital doctors. The cost of X-rays, laboratory tests, minor operations, and injections was calculated from 1980 hospital expenses; the data are presented in two tables: distribution of outpatients by age and cost per outpatient visit (in cents). The implications of the conclusion that costs for minor ailment treatment in clinics are higher than in hospitals are discussed. (EB)

10283 **Plaisghaus, J.M.** *Cost-benefit of measles immunization; a study from southern Zambia.* Bern, Switzerland, Peter Lang, Medezin in Entwicklungslandern, No. 3, 1982. German. 72 refs.

After briefly discussing measles vaccination, prevalence, complications, and cost-benefit problems in the introduction, the author assesses the status of this disease in Southern Province, Zambia. Both the costs and benefits of measles immunization are analyzed and the results are considered in terms of costs per life saved, benefits from immunization, and cost-benefit ratios and balance points. A discussion section covers such issues as economic approaches to evaluation, the interrelationship of costs and benefits, mortality, and target populations. Copious statistical data are included. (DP-E)

10284 **Pugh, R.N., Teesdale, C.H.** *Single dose oral treatment in urinary schistosomiasis: a double blind trial.* British Medical Journal (London), 286, 5 Feb 1983, 429-432. Engl. 14 refs.

A double blind trial of three oral preparations (praziquantel, metrifonate, and metrifonate and niridazole combined) given in single doses for the treatment of *Schistosoma haematobium* infection was carried out in 600 schoolchildren (517 boys) aged 5-18 years in Malawi. The results, discussed and presented as statistical data, show that while praziquantel appears to be the most effective and convenient drug available, the combined regimen is a cheaper alternative for treatment where cost is important and parasitological cure not an essential objective. (Modified journal abstract)

10285 **Silverman, M., Lee, P.R., Lydecker, M.** *Drugging of the Third World.* International Journal of Health Services (Farmingdale, N.Y.), 12(4), 1982, 585-596. Engl. 14 refs.

This article reports on an investigation of the promotion of more than 500 products marketed by over 150 pharmaceutical companies in the USA, UK, Latin America, Africa, and Asia. Material presented to physicians in developing countries was characterized by gross exaggeration of product effectiveness and minimized or ignored potential hazards; the type of company made no real difference in this regard. Industry claims that promotion is a reflection of the policies of various regulatory agencies was not supported by evidence. Bribery of physicians and key government officials may play an important role in this matter. Some of the proposed corrective approaches to this problem are examined. (Modified journal abstract)

10286 **Simmons, G.B., Smucker, C., Bernstein, S., Jansen, E.** *Post-neonatal mortality in rural India: implications of an economic model.* Demography (Washington, D.C.), 19(3), Aug 1982, 371-389. Engl. Refs.

This paper argues that the mortality experience of children aged 1-36 months can be understood in part as a process of choices based on family size, sex composition objectives, and budgetary constraints. The model is tested with survey data from rural Uttar Pradesh, India; the results are consistent with the hypothetical framework developed. The authors conclude that the fertility/mortality decision is reevaluated with each birth. The burden of this pattern of choice is felt particularly strongly after female births. Statistical data are included. (Modified journal abstract)

V.6 Cultural Aspects

See also: 10253, 10313, 10439.

10287 **Agarwal, D.K., Agarwal, K.N., Tewari, I.C., Singh, R., Yadav, K.N.** *Breast feeding practices in urban slum and rural areas of Varanasi.* Journal of Tropical Pediatrics (Oxford, UK), 28(2), Apr 1982, 89-92. Engl.

This study of breast-feeding in 141 rural and 218 urban slum nursing mothers in Varanasi, India, demonstrates that the traditions of prolonging breast feeding until the next pregnancy and discarding colostrum still continue. The averages for duration of breast-feeding was 24.5 months in rural children and 18.75 months in urban children. There was considerable delay in the introduction of complementary feeds and supplementation with semisolids in both groups. It appears that the education of nursing mothers and the appropriate training of physicians in child health are likely to bring about substantial improvements in this field. Statistical data are included. (Modified journal abstract)

10288 **Caldwell, J.C.** *Education maternelle et mortalité infantile. (Maternal education and infant mortality).* Développement et Santé (Paris), 38, Apr 1982, 22-24. Fren.

Maternal education is emerging as the single most significant determinant of the level of infant and child mortality. The author examines three possible explanations for the phenomenon under discussion: (1) educated mothers break with tradition and adopt many child care alternatives, thus influencing their children's chances of survival; (2) women with schooling are more capable of manipulating the modern world and are more likely to know where the proper facilities are; and (3) the education of women greatly changes the traditional balance of familial relationships, with profound effects on child care. (EB)

10289 **Caraguy, R.N.** *Training indigenous health workers: a Philippine experience.* World Health Forum (Geneva), 3(2), 1982, 159-163. Engl.

Because midwives form the backbone of the Philippine's restructured health care delivery system, efforts are being made to train *herbolarios* (traditional practitioners) to perform some of the same functions. In 1978-1979, 27 *herbolarios* received a 3-month course in primary care; the pretraining, training, and post-training phases of the programme are described. The results of the project are briefly discussed. (DP-E)

10290 **Carlson, B.W., Pande, B.B., Vaidya, K.** *Socio-educational influences on Nepali women and their association with innovative values and behaviors.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 2(3), 1981-1982, 253-266. Engl. 16 refs.

A sample of 1 417 married women from 14 *panchayats* in Nepal were interviewed in order to explore the relationship between modernization — as evidenced by the practice of contraception, desired family size, and scientific treatment of sick children — and a number of independent variables. This paper describes the independent variables and analyzes and discusses the survey findings. Modernization was associated with region, having children in school, ownership of money, and access to media, but variations in the strength of association suggest that specific changes are more likely stimulated by particular influences that may vary with location and time. (HC-L)

10291 **El Dareer, A.A.** *Epidemiology of female circumcision in the Sudan.* Tropical Doctor (London), 13(1), Jan 1983, 41-45. Engl. 20 refs.

A brief history of female circumcision customs in Arab and African societies is followed by a description of the various methods of circumcision and the areas in which they are practiced. The results of a questionnaire survey involving 10 000 females and 5 000 males throughout the Sudan are discussed and summarized in six tables. The average age for the operation was 7 years; 81% were performed by traditional birth attendants, using mainly a special razor (*moos el shurafa*) and rarely administering anaesthesia. "Religious demand" was the main reason given by the 81% of the respondents who agreed with the practice. A number of case histories are described. (EB)

10292 **Enders, W.T.** *Subjective evaluation and utilization of hospitals by low-income urban residents in Porto Alegre, Brazil.* Social Science and Medicine (Aberdeen, UK), 15(4), Nov 1981, 525-536. Engl. 39 refs.

The purpose of this study was two-fold: to discover how residents of a lower-class community in a Brazilian city evalute hospitals and how their perception is related to their utilization of the same, and to consider the value of the methodology used as a tool for facilitating integration between health needs and available resources in the community under study. This paper details and comments on the study methodology and findings. Briefly, considerable agreement between the residents was expressed regarding the quality of seven hospitals, but this was not reflected in their choice of facility. It is therefore suggested that "the powerful forces of class consciousness and social structure continue to restrict their freedom of choice, regardless of their capacity to pay". (HC-L)

10293 **Freeman, P.D., Hagen, D.P.** *Impact of class, education, and health care on infant mortality in a developing society: the case of rural Thailand.* Demography (Washington, D.C.), 19(3), Aug 1982, 391-408. Engl. 29 refs.

Data from the Northern Thailand Fertility Study conducted between September 1976-January 1977, involving 1 173 married couples and the 3 629 live single births recorded in the mothers' pregnancy histories, were used in this in-depth analysis to assess the extent to which the differing ability and willingness of individual families to provide adequate infant care has affected infant survival in rural northern Thailand. Using log-linear modified multiple regression models, tests of all demographic and social factors were carried out, taking into consideration father's social class, mother's education and level of health, local level of socioeconomic development, parental beliefs about intergenerational wealth transfers, and whether the birth was wanted by both parents. The discussion includes six tables from the study. (EB)

10294 **Haq, I., Khan, C.** *Hazards of a traditional eye-cosmetic.* Journal of the Pakistan Medical Association (Karachi), 32(1), Jan 1982, 7-8. Engl.

Surma, the traditional eye cosmetic of the Indo-Pakistan subcontinent originally containing antimony sulphide, is now frequently adulterated with galena (PbS) or may consist of pure galena. Analysis of 40 samples of *surma*, both locally produced products and others obtained from pilgrims returning from Mecca, revealed concentrations of lead (as PbS) ranging from 0.03%-81.4% in 50% of the samples. Severe cases of lead poisoning have resulted from the use of *surma* among UK immigrants from Pakistan, Bangladesh, and India as well as locally. Statistical data are included. (Modified journal abstract)

10295 **Hiegel, J.P.** *Cooperating with traditional healers.* World Health Forum (Geneva), 3(2), 1982, 231-235. Engl.

In the severe conditions in the refugee camps in Thailand, it was necessary to make use of traditional healers. They proved to be of great value, providing care in which their Khmer patients had faith; their conduct also won the respect of Western doctors. Some traditional Khmer treatments, especially in the area of mental illness, are described. (Modified journal abstract)

10296 **Kasse Acta, E.** *Aspectos socio-culturales de la estructura de la familia y el niño en comunidades urbanas de países subdesarrollados: la familia dominicana. (Sociocultural aspects of the family and the child in urban communities in underdeveloped countries: the Dominican family).* Archivos Dominicanos de Pediatría (Santo Domingo), 17(3), Sep-Dec 1981, 201-213. Span. 20 refs.

Seminario sobre El Niño en la Ciudad, Tokyo, Japan, 26-28 Mar 1981.

Demographic, social, and cultural characteristics of the population of the Dominican Republic are reviewed, with emphasis on their influence on family structure. Data are presented on family composition, migration, attitudes towards adultery and virginity, child anthropometry, availability of hospital beds, malnutrition, literacy, living conditions, mortality, and the birthrate. (RMB)

10297 **Kroeger, A.** *South American Indians between traditional and modern health services in rural Ecuador.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(3), 1982, 242-254. Engl. 31 refs.
Also published in Spanish in *Boletin de la Oficina Sanitaria Panamericana*, 93(3), 1982.

With an aim to examining people's use of traditional and modern health services in terms of their opinions and attitudes regarding those services, the author carried out a cross-sectional survey in 1978 of 727 households (4 170 residents) among four Ecuadorean Indian populations. The results of six similar community-based studies carried out in Latin America are compared with the present study, which revealed a marked preference for modern health services over traditional healers and drug-sellers. Further, it indicated a marked tendency toward multiple use of different healing systems and lack of confidence in existing services. Lack of cultural, geographic, and financial accessibility was the main reason for not using modern health services. Figures and statistical tables are included. (EB)

10298 **Kroeger, A., Barbira-Freedman, F.** *Cultural change and health: the case of South American rainforest Indians.* Bern, Switzerland, Peter Lang, Medizin in Entwicklsländern, No. 12, 1982. 65p. German. 175 refs.

This paper collates some of the main research data on the health implications of acculturation in order to develop an epidemiological model that could contribute to a better understanding, and point to practical solutions, of the problems of the upper Amazon, with special reference to the Shuar and Achuar tribes of Ecuador. After the presentation of some background information, their traditional environmental adaptation is analyzed in terms of social adaptation to the ecosystem, disease patterns, and medical systems. The changes of the disease spectrum as part of the process of ethnic and environmental transformation resulting from the destruction of the ecosystem are examined along with genetic and demographic implications, nutritional changes, and the new medical system. Some general health considerations are discussed. (DP-E)

10299 **MacCormack, C.P.** *Ethnography of fertility and birth.* London, Academic Press Inc., 1982. 293p. Engl. Refs.

This collection of 10 papers by health and social scientists provides anthropological, medical, and demographic insights into the process of human birth and is based on the authors' fieldwork in various parts of the world. A number of variables influencing fertility and birth are described. These include patterns of sexuality, marriage, residence, diet, lactation, and medical practices. Beliefs and rituals surrounding diviners, spirit mediums, witchcraft, women's initiation rites, herbalists and traditional midwives are also considered; the societies in question range from rural agricultural environments to urban industrial settings. The book contains some useful photographs, a comprehensive index, and extensive bibliographies. (EB)

10300 **Odebiyi, A.I., Ekong, S.C.** *Mothers' concept of measles and attitudes towards the measles vaccine in Ile-Ife, Nigeria.* Journal of Epidemiology and Community Health (London), 36(3), Sep 1982, 209-213. Engl. 30 refs.

The attitudes of Nigerian mothers, mainly Yoruba, towards measles vaccine and other aspects of prevention are influenced by different perceptions of the cause of measles. There is a significant correlation between the literacy of mothers and their belief in the efficacy of measles vaccine but not between their ages and belief. The mothers' perception of measles is a function of their socioeconomic characteristics, with the lower socioeconomic group tending more to define measles within the supernatural context. The findings indicate the necessity for health education to be based on local culture when promoting vaccination. Statistical data are included. (Modified journal abstract)

10301 **Onuoha, G.B.** *Factors responsible for underutilization of available health services by the rural people in Nigeria.* East African Medical Journal (Nairobi), 58(11), Nov 1981, 859-866. Engl. 16 refs.

A survey carried out in the rural town of Nsukka, Nigeria, revealed that the health services, although of good quality and accessibility, were being underutilized by the population. Interviews with 260 women attending the health centre revealed that, although most registered for antenatal care at a modern facility, many preferred to be delivered at home by a traditional birth attendant. Based on their responses, it is concluded that the factors involved in underutilization are: the people's belief in and cultural affinity for traditional practitioners; the impersonal attitude of some health personnel; problems in obtaining Western drugs in the prescribed manner; and the belief that certain diseases (e.g. malaria) can only be cured by traditional practitioners. (HC-L)

10302 **Plunde, D.S.** *Sexually transmitted diseases in Ethiopia: social factors contributing to their spread and implications for developing countries.* British Journal of Venereal Diseases (London), 57(6), Dec 1981, 357-362. Engl. 17 refs.

Indications are that the incidence of sexually transmitted disease (STD) is very high in Ethiopia. Migration of men to the cities in search of employment has left large numbers of women to fend for themselves in the country. One of the few opportunities open to them for making a living is brewing and selling beer at roadsides and marketplaces and acting as 'temporary wives' to travellers. Thus, they become a reservoir of STD, whose spread is aggravated by widespread ignorance and misuse of antibiotics. The author comes to the inescapable conclusion that greater education and employment opportunities for women are central to the control of STD in Ethiopia. (HC-L)

10303 **Sargent, C.** *Utilization of national health maternity services in a northern district of People's Republic of Benin.* Rural Africana (East Lansing,

Mich.), (8/9), Fall-Winter 1980-1981, 77-89. Engl.

Patterns of utilization of national health maternity services among urban women in Kouande, Benin, are examined. These patterns are changing from those of surrounding rural areas due to several factors: the economic structure of the town of Kouande, infrastructural constraints related to clinic use, availability of women from the more urbanized south of Benin to serve as role models for women of Kouande, and changes in the stratification system in northern Benin. The author discusses the effect of the above factors as well as considerations such as education, occupation, ethnicity, and urban experience on women's obstetrical care preferences. Statistical data are included. (Modified journal abstract)

10304 **Sharp, P.T.** *Ghosts, witches, sickness and death: the traditional interpretation of injury and disease in a rural area of Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 108-115. Engl. 18 refs.

Among the Enga people of the highlands of Papua New Guinea, the principal causes of mortality and morbidity are respiratory tract infections, other infectious illnesses, childbirth complications, and trauma including that resulting from tribal wars. The tribes believe that serious illness has a spiritual cause and may be divine punishment for some moral transgression or social offence. Ghosts have the power to bring sickness and death to living relations. This article looks at some of the fundamental beliefs of the Enga, Hewa, Ipili, and Paiela tribes. These include witchcraft, sorcery, shakers, and spiritualism. The need is stressed for understanding by professional medical and health workers of traditional beliefs of people in remote areas so that modern technology can interact effectively with traditional approaches. (EB)

10305 **Singion, B.T.** *Study of income and attitude of government doctors.* Surabaya, Indonesia, Badan Penelitian dan Pengembangan Kesehatan, 1979. 94p. Engl. 18 refs.

A February-May 1976 study of the income and attitudes of 252 randomly-chosen career civil service physicians in Indonesia showed a tendency among doctors towards urbanization and specialization that provides them with more rewards and opportunities. This has led to a gradual weakening of the government's policy of strong emphasis on rural health care. The author looks at some aspects related to the choice of location and type of practice, working conditions, career advancement, physician productivity, the incentive structure, the reward system, and financial and non-financial rewards. Thirty-six tables of data are included in the discussion. (EB)

10306 **Tan, M.G.** *Changing food habits in rural households in Indonesia.* Jakarta, National Institute of Economic and Social Research (LEKNAS-LIPI), n.d. 13p. Engl. 14 refs.

The present analysis is based on a 1969 study of food patterns and habits in five rural areas in Indonesia and on a 1972-1973 study of 30 villages to evaluate a project aimed at improving the nutritional status of the Indonesian family. It focuses on beliefs and taboos related to food and on the attitudes towards food and its distribution within the family. While it is apparent that socioeconomic factors influence the quantity and quality of the food that is consumed, it is important that a closer look be taken at the scheme for improving family nutrition and at eliminating major nutritional problems, especially among children. (EB)

10307 **Tan, M.G.** *Social and cultural determinants of family planning services.* Jakarta, National Institute of Economic and Social Research, 1974. 22p. Engl. 50 refs.

Since most family planning programmes in developing countries are carried out on a voluntary basis, the theory has often been expressed that basic structural change in Third World societies is a prerequisite for fertility reduction. this paper examines two questions: (a) under what conditions will individuals consciously reduce the number of children they will have and (b) what are the social, cultural, and political factors that inhibit or promote the acceptance of a small-size family norm? It focusses on the approach and mechanisms needed to make family planning programmes and services acceptable. Three tables of data are included in the discussion. (EB)

10308 **Van-Dunen, M.B.** *Médecine traditionelle angolais et l'enfant. (Traditional Angolan medicine and the child).* Hamdard Medicus (Karachi), 25(1/4), 1982, 156-165. Fren.

Based on a 1979 ethno-pharmacognostic study in the Luanda-Kwanza area of Angola, where 70% of the population consults traditional practitioners, this paper presents a brief look at the structure of traditional Angolan medicine among two ethnic groups, the Kimbundu and the Tchokwé, and discusses methods of diagnosis and treatment of some common childhood diseases (traditional names: *M'Bicho, N'jura, Urre, and N'Jila*). Included is a list of traditional plants and their botanical and vernacular names in the different national languages, stating which parts of the plant are used for which intestinal disease. (EB)

10309 **WHO, Geneva.** *Contemporary patterns of breast-feeding; report on the WHO Collaborative Study on Breast-feeding.* Geneva, WHO, 1981. 211p. Engl. Refs.

The WHO Collaborative Study on Breast-feeding was undertaken because of concern over the erosion of traditional breast-feeding patterns in the Third World. The study had two objectives: (1) to determine contemporary breast-feeding practices and (2) to measure the volume and composition of breast milk. This report of the 1st phase of the study describes the prevalence and duration of breast-feeding among different socioeconomic and cultural groups in nine countries, the aim being to provide a basis for effective and appropriate programmes designed to improve infant feeding practices. The organization of health services, health legislation, and the marketing of breast milk substitutes are briefly consid-

ered. Statistical data are included. (Modified journal abstract)

10310 **Yoder, P.S.** *Biomedical and ethnomedical practice in rural Zaire: contrasts and complements.* Social Science and Medicine (Aberdeen, UK), (16), 1982, 1851-1857. Engl. 31 refs.
A number of issues involved in the integration of traditional and Western-style medical services in rural Zaire are discussed. After an examination of the characteristics of both systems, their strengths and weaknesses are evaluated and compared. In promoting cooperation between different types of practitioners, project planners should consider the strengths and weaknesses of each type of medical practice and should seek to improve the use of existing medical resources. The paper concludes by outlining a series of progressive stages of contact among practitioners that could lead to a system of mutual referral. (Modified journal abstract)

10311 **Young, M.W.** *Children's illness and adult's ideology: patterns of health care on Goodenough Island, Milne Bay Province.* Papua New Guinea Medical Journal (Port Moresby), 24(3), Sep 1981, 179-187. Engl.
Analysis of the health records from two health centres on Goodenough Island, Papua New Guinea — one a hospital begun by Methodist missionaries in 1961 and the other a community health centre established in 1972 — revealed some unexpected patterns. In keeping with local ideology, boys were consistently and exaggeratedly favoured over girls in both facilities. Children were favoured over adults during the early years of the hospitals operation but this trend was reversed during the late 1970s, presumably as the paternalistic, missionary zeal of the hospitals founders gave way to a push for greater economy and self-sufficiency on the part of its post-independence inheritors. It is the former that strikes the author as anomalous '...not the policy which hospitalizes one child in 16, but the policy which finds justification in hospitalizing one child in every two'. (HC-L)

V.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 09806, 09957, 10238.

10312 **Abadi, K., Sasubone, P.H.** *Phenylene di-isothiocyanate (1,4) or Jonit in the treatment of hookworm infections in Ujung Pandang, South Sulawesi, Indonesia.* Ujung Pandang, Indonesia, Hasanuddin University, Faculty of Medicine, Department of Parasitology, 1981. 5p. Engl.
The authors describe their experience with the drug Jonit in the treatment of 60 outpatients aged 5-50 years who suffered from hookworm infection (egg count 500-5 000 eggs:gm) in Ujung Pandang, Indonesia. The dosages and side effects of three subject groups (11 patients aged 5-10 years, 13 patients aged 11-15 years, and 36 patients aged 16-50 years) are discussed with the use of four tablets. The results of the clinical trial suggested that single dose regimens of Jonit would be useful in mass eradication schemes for the control of hookworm. (EB)

10313 **Aden, A., Birk, S.** *Study of child mortality in Mogadishu Somalia.* Journal of Tropical Pediatrics (London), 27(6), Dec 1981, 279-284. Engl.
A brief geographic and demographic sketch of Somalia is followed by a description of the maternal child care situation in Mogadishu, the capital. The results of a 1977 child mortality survey consisting of interviews of 852 women in Mogadishu and Balad district, to be used in the development of maternal child health services, are reported. The mothers, aged 16-44 years, were questioned on their obstetric history and causes of their children's deaths. Stillbirths accounted for 3.2% (119) of the 3 774 deliveries. Of the 3 655 live births, 25.5% (932) died: tetanus (174, 19.1%) and diarrhea (201, 22.0%) were the major causes of the 913 deaths in children in different age groups, with diarrhea being more prevalent in urban than rural areas, where bottle-feeding is less popular. The report includes five tables of data from the study. (EB)

10314 **Adioman, D., Nyberg, A.** *Interactions between health and work in four Javanese villages.* Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, 1977. 36p. Engl. 22 refs.
The general purpose of this study is to evaluate health levels and utilization of health and medical services and to relate these varying situations to labour productivity. Reporting the results of a survey conducted among low-income families (total of 975 households) in four central villages in Java, Indonesia, this survey was designed to determine social costs of ill health, which are assumed to be greater than economic costs. To this end, it examines social and economic conditions of the area, labour productivity and employment opportunities, health conditions and availability and usage of medical facilities, income and health expenditures, food consumption, and nutrition. Statistical data (20 tables) are included. (EB)

10315 **Agarwal, J.L., Seth, P., Sisodia, A.K.** *Studies on endemic goitre in Gorakhpur area.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(2), Feb 1982, 45-49. Engl. 14 refs.
Examination of 100 randomly selected students from three schools in Gorakhpur, India, revealed that non-goitrous children had higher values of basal oral temperature, basal metabolic rate, and protein-bound iodine, and lower total serum cholesterol levels than children with goitre. These results are discussed and presented as statistical data. (DP-E)

10316 **Al-Ani, M.R.** *Diet and dietary habits of nomads in Iraq.* Ecology of Food and Nutrition (London), 9(1), 1980, 55-57. Engl. 10 refs.
Based on the author's observations, this paper tabulates the kinds and amounts of food consumed by Iraqui nomads and compares the average daily intake of major nutrients with levels recommended by the National

Academy of Science, USA, and FAO and WHO. Food from animal origin constituted 50% of the daily intake and the diet was found to be adequate with respect to protein, calories, calcium, phosphorus, iron, thiamin, riboflavin, and niacin. Intakes of vitamin A and ascorbic acid were lower than the recommended figures but were not causing any overt deficiency symptoms. The government is presently pursuing a policy of settling nomads and the dietary changes that usually accompany settlement — i.e. substitution of tea, sugar, and bread for animal products — are more likely to pose a threat to nutrition status than are present eating habits. (HC-L)

10317 **Alecrim, M. das G., Dourado, H., Alecrim, W., Albuquerque, B.C., Wanson, E.** *Tratamento da malária (P. falciparum) com clindamicina. (Treatment of* Plasmodium falciparum *malaria with clindamycin).* Revista do Instituto de Medicina Tropical de São Paulo (São Paulo, Brazil), 23(2), Mar-Apr 1081, 86-91. Portuguese. 21 refs.

In a clinical trial in Brazil, 19 individuals with *Plasmodium falciparum* malaria were treated with clindamycin, administered intravenously at 12-hour intervals for 3 days; another 17 were treated with the same regimen, intravenously for 3 days and orally for an additional 4; and a control group of 16 was given a combination of sulfadoxin and pirimethamin. In the 1st group, 11 were cured, 6 evidenced R 1 resistance, and 2 abandoned the trial; in the 2nd, 14 were cured and 3 abandoned the trial; and in the control group, 5 were cured and 11 evidenced resistance. The 7-day regimen was thus concluded the most effective of the three. Drug dosages and five tables of study findings are provided. (HC-L)

10318 **Allen, B.A.** *Epidémiologie du trachome au Mali. (Trachoma epidemiology in Mali).* Méditerranée Médicale (Asnières, France), 9(257), 2 Sep 1981, 43-46. Fren.

Trachoma, conjunctivitis, cataracts, and onchocerciasis are among the main eye diseases affecting between 50 000-100 000 of Mali's 6.3 million inhabitants. This article reports on the findings of recent studies into the epidemiology of trachoma, which occurs in all six regions of the country. A survey of 1 114 schoolchildren in six villages of Region I revealed a prevalence variation of 1.5%-21.8%. A breakdown by age and sex of 276 cases (120 male, 156 female) of trachoma in the various stages is given. Of the 120 cases of trichiasis, 10 were found in adolescents aged 10-19 years. Efforts are underway to produce epidemiological maps of eye diseases throughout Mali. (EB)

10319 **Alhassan, F.M., Al-Ahmi, F.A., Admani, M.S., Alfadjoi, A.M., Al-Shakweshi, N.M.** *Prevalence of sickle cell disease in Abu-Al-Khasib district of southern Iraq.* Journal of Tropical Medicine and Hygiene (London), 84(2), Feb 1981, 77-80. Engl. 14 refs.

Abu-al-Khasib district, Iraq, is known to have a high prevalence of sickle-cell anaemia. Examination of 706 children aged 10-12 years from four villages in the district revealed that 16% of them had sickle cell disease and 13.3% carried sickle cell trait, as compared to 2.5% for both in a control population. This paper describes the study methodology and results and points out the need for early screening measures and marriage/genetic counselling as part of the overall health and welfare services. (HC-L)

10320 **Ashworth, A.** *International differences in infant mortality and the impact of malnutrition a review.* Human Nutrition: Clinical Nutrition (London), 36C(1), 1982, 7-23. Engl. 61 refs.

In developing countries infant mortality remains high, particularly in Africa, the Indian subcontinent, and Southeast Asia. Observed rates of decline during the last 20 years have been no greater than in the industrialized countries and may have been lower. Although a greater proportion of infant deaths occur postneonatally compared with developed countries, the majority nevertheless occur within the first 3 months of life, due mainly to low birth weight and diarrheal disease. The implications in terms of health and nutrition policies are discussed. Statistical data are included. (Modified journal abstract)

10321 **Awad El Karim, M.A., Collins, F.J., Sukkar, M.Y., Omer, A.H., Amin, M.A.** *Assessment of anti-schistosomal treatment on physical work capacity.* Journal of Tropical Medicine and Hygiene (London), 84(2), Feb 1981, 67-72. Engl. Refs.

Twenty-two men from the Gezira in the Sudan who were infected with *Schistosoma mansoni* were tested in an exercise laboratory in Khartoum and the tests were repeated about 1 year later. They were treated with hycanthone and periodically monitored to ensure that they had remained free of the disease; they were also given anti-malarial prophylaxis. The tests showed a significant increase in work capacity, pulmonary function, and mean haemaglobin concentration. Also, the subjects were less fatigued after the tests. Statistical data are included. (Modified journal abstract)

10322 **Bano, L., Begum, Y.** *Observation on incidence of infection with intestinal parasites in the school children of Peshawar (Pakistan).* Pakistan Journal of Medical Research (Lahore), 20(2), Apr-Jun 1981, 49-55. Engl. 16 refs.

From 1972-1976, examination of 1 140 stool samples from schoolchildren in Peshawar, Pakistan, revealed the following incidence of infection in the 403 positive cases: giardiases (22.75%), *Entamoeba coli* (25.75%), *E. histolytica* (14.5%), *Hymenolepis nana* (18.0%), *Ascaris lumbricoides* (13.5%), *Enterobius vermicularis* (3.5%), and *Trichuris trichuria* (0.75%). These findings are discussed and presented as statistical data. (Modified journal abstract)

10323 **Baruzzi, R.G., Abdalla, N., Black, F.L.** *Measles and measles vaccination in isolated Amerindian tribes; II: the 1978/79 Xingu epidemic.* Tropical

and Geographical Medicine (Dordrecht, Netherlands), 34(1), Mar 1982, 7-12. Engl. Refs.

Vaccine induced measles antibody titres in the Upper Xingu Indians of Brazil remained at satisfactory levels without evidence of decline over a period of 6 years without re-exposure. However, in another area of the country, a vaccination programme that used a reduced dose of vaccine was only 63% effective. When measles virus was introduced to the latter area, a protracted epidemic ensued with 23% morbidity and 6 deaths. The deaths occurred exclusively in persons aged less than 13 months or more than 40 years. Statistical data are included. (Modified journal abstract)

10324 **Bachar, S.** *Seasonality of deaths in Matlab, Bangladesh.* International Journal of Epidemiology (Oxford, UK), 10(3), 1981, 271-280. Engl. 21 refs.

Deaths registered from 1972-1974 in a rural area of Bangladesh were analyzed for seasonal patterns, age, and cause of death. The findings are discussed and presented as statistical data. They indicate that neonatal mortality tends to peak in August, while postneonatal deaths peak in April because of the high incidence of dysentery; deaths of persons aged more than 45 years peak in the cool season; deaths from dysentery and chronic diarrhea are highest in December; and accidental deaths peak in July due to increased drownings during the monsoon. (Modified journal abstract)

10325 **Belazzoug, S., Tabet-Derraz, O.** *Leishmaniose viscérale en Algérie, recensement des cas diagnostiqués entre 1975 et 1980. (Visceral leishmaniasis in Algeria; cases diagnosed between 1975 and 1980).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 75(2), Mar-Apr 1982, 169-173. Fren.

A total of 156 cases of visceral leishmaniasis were recorded in Algeria during 1975-1980, with the most affected areas being the Tizi-Ouzou and Béjaia regions (47 and 40 cases respectively). The relatively low overall annual incidence of 0.18:100 000 inhabitants may be due to incomplete laboratory analysis, especially in the interior of the country, where many children die before diagnosis is established. It is felt that the cessation of the antimalarial campaign with DDT may be causing the increase in the number of cases of leishmaniasis. The authors refer to similar studies in their discussion of epidemiological factors, summarizing the results of their survey in three tables. (EB)

10326 **Biswas, H., Arora, B.B., Misra, B.S.** *Distribution pattern of* Ascaris lumbricoides *infection in a selected rural community.* Journal of Communicable Diseases (New Delhi), 12(2), 1980, 83-87. Engl. 9 refs.

In a study of the distribution pattern of *Ascaris lumbricoides* infection, analysis of 130 households comprising 757 individuals of a total population of 4 739 selected at random from Malakhera village, Rajasthan, India, revealed a prevalence rate of 4.6%. The results are discussed and presented as statistical data. A direct relationship of ascaris infection with rainfall and humidity was established; maximum average prevalence (5.4%) was recorded from July-September. There was also an association with larger households, overcrowded areas, and a low socioeconomic group with poor hygienic conditions as well as with an age of less than 15 years. About 5.6% were found to excrete the eggs for more than 3 months, which highlighted the persistent nature of this infection. (DP-E)

10327 **Blaser, M.J., Hug, M.I., Ghos, R.I., Zimichi, S., Birkness, K.A.** *Salmonellosis at rural and urban clinics in Bangladesh; epidemiologic and clinical characteristics.* American Journal of Epidemiology (Baltimore, Md.), 116(2), 1983, 266-275. Engl. 39 refs.

Epidemiological and microbiological studies of diarrheal illness associated with non-*typhi Salmonella* at two Bangladesh clinics from 1977-1979 isolated this pathogen in 0.29% of fecal specimens or rectal swabs from urban patients and in 0.26% of similar specimens from rural patients, with peak incidence during the summer. Isolations of *Shigella* and *Vibrio cholerae* were much more common. Symptoms related to salmonella-caused diarrhea included vomiting (88%), water diarrhea (78%), abdominal pain (61%), and fever (39%), but the clinical features of the illness and the socioeconomic backgrounds of the patients could not be distinguished from those of matched controls attending the same clinic. Statistical data are included. (Modified journal abstract)

10328 **Bonfante-Garrido, R., Barreto, T.** *Leishmaniosis tegumentaria americana en el distrito Urdaneta, Venezuela. (American cutaneous leishmaniasis in Urdaneta district, Venezuela).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(1), Jul 1981, 30-38. Span. 12 refs.

This paper presents the results of clinical, parasitological, ecological, and epidemiological studies of cutaneous leishmaniasis in Urdaneta district, Lara state, Venezuela. In all, 50 affected individuals were studied and treated. Of these, 6% presented auricular, 84% common ulcerative, 8% pydermoid, and 2% chromomycoticoid lesions. The aetiological agent was identified as a form of *Leishmania braziliensis* and the vectors, the anthropophilic sandflies *Lutzomyia evansi*, *L. gomezi*, and *Psychodidae panamensis*. An animal survey revealed that 17 donkeys and one dog were affected by the disease. Considerable information on the climate and geography of the region are provided. (HC-L)

10329 **Bouhlel, R., Gandri, M., Hannen, M., Ben Ayed, H.** *Goitre simple: fréquence et évaluation biologique. (Simple goitre: frequency and biological evaluation).* Tunisie Médicale (Tunis), 59(5), 1981, 339-343. Fren.

The results of a study on the frequency of simple goitre in two endemic regions of Tunisia are discussed and summarized in 9 tables. The examination methods used

in the survey, which involved a total of 9334 subjects aged 6-30 years (4 859 from the Northwest region, Zone I, and 4 475 from the Tunis area, Zone II) are described. The frequency was 36% (1 747 cases) in Zone I and 3.6% (160 cases) in Zone II, affecting mostly adolescents. A number of conclusions regarding response to treatment are presented. (EB)

10330 **Brandling-Bennett, A.D., Anderson, J., Fuglsang, H., Collins, R.** *Onchocerciasis in Guatemala: epidemiology in fincas with various intensities of infection.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(5), Sep-Oct 1981, 970-981. Engl. 22 refs.

To provide information on the epidemiology of *Onchocerca volvulus* infection and to define the association between indicators of infection and onchocercal eye disease, skin snips were obtained from and skin and ocular examinations were performed on 892 persons from seven Guatemalan plantations. The results are discussed and presented as statistical data. They indicated that skin-snip positivity and the density of microfilaria in the skin increased with age, reaching the highest levels at age 15-19 years, and both were greater in males and females. (Modified journal abstract)

10331 **Brown, K.H., Gilman, R.H., Gaffar, A., Alamgir, S.M., Sirife, J.L.** *Infections associated with severe protein-calorie malnutrition in hospitalized infants and children.* Nutrition Research (Elmsford, N.Y.), 1(1), 1981, 33-46. Engl.

This paper describes all the types of infections identified in 100 Bangladeshi children admitted to hospital with severe malnutrition during a 4-month period in 1976. For the entire group, 75% had one or more major infections, 49% had pneumonia (including 14% of admissions with presumed pulmonary tuberculosis), 40% had enteric infections (most commonly rotavirus and shigellae), and 30% had urinary tract infections. Of the 21 patients who died, the cause of death was most frequently related to infection. The authors conclude that the identification and treatment of infections should be a major component of rehabilitation. Statistical data are included. (Modified journal abstract)

10332 **Castana, R.** *First admissions to psychiatric facilities in Brazil, 1960-1974.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(2), 1981, 148-159. Engl. 29 refs.
Also published in Portuguese in *Boletin de la Oficina Sanitaria Panamericana.*

This article provides an epidemiological analysis of 1st admissions to psychiatric hospitals in Brazil since 1960. The results, discussed and presented as statistical data, show that rates of 1st admissions for all groups increased until 1970. White males generally had the highest rate, followed by non-white males, white females, and non-white females; rates increased with age in each group, peaking at 49 years. The most frequent diagnoses among males were schizophrenia and alcohol and drug dependence; among females, schizophrenia, neuroses, and personality disorders. These findings are examined in the light of Brazil's organization of psychiatric services and social conditions. (Modified journal abstract)

10333 **Campbell McIntyre, R., Prebluda, S.R., Pollei, A., Koroua, M.** *Measles and measles vaccine efficacy in a remote island population.* Bulletin of the World Health Organization (Geneva), 60(5), 1982, 767-775. Engl. 13 refs.
Also published in French and Russian.

Examinations of 258 children aged 1-9 years on Ebeye, Marshall Islands, immediately after a measles epidemic revealed an 83.5% efficacy rate for the measles vaccine that had been administered for 9 preceding years. Although there was no significant decrease in immunity due to number of years since immunization, age at time of vaccination, or combination with other vaccines, the higher attack rate experienced by children vaccinated during 1976 or in August 1977 was attributed to the improper storage of measles vaccine during these periods. Statistical data are included. (Modified journal abstract)

10334 **Carrazza, F.R., Speretta, G.** *Reidratação oral em pediatria. (Oral rehydration in pediatrics).* Arquivos de Gastroenterologia (São Paulo, Brazil), 17(3), Jul-Sep 1980, 168-172. Portuguese. 29 refs.

This paper presents a brief review of experience with oral rehydration solutions in the treatment of cholera and other diarrheas over the past 30 years. It then compares the electrolyte composition, carbohydrate content, and osmotic properties of four commercial oral rehydration solutions available in São Paulo, Brazil. The two solutions with the highest glucose content were found to exhibit above-optimal osmotic ability and were therefore not recommended for the treatment of diarrhea in children. Further studies are needed to establish the ideal composition of a rehydration solution for pediatric use. (HC-L)

10335 **Chari, P.S., Mittal, M., Rana, A.** *Educational needs of rural mothers of Gagret village in Himachal Pradesh for forming desirable food habits in children of 4-6 years of age.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(1), Jan 1982, 14-19. Engl.

The level of knowledge of 50 village women from Himachal Pradesh, India, in four areas related to child feeding (establishing eating habits, diet, developing attitudes, and serving food) was assessed by means of a questionnaire. The results are discussed and presented as statistical data. Higher scores were achieved by literate women, those with three or more children, older mothers, and those from lower income groups, who seemed to make better use of limited food resources. Suggestions are put forth for nutrition education aimed especially at these women, who obtained most of their information from family and friends but rarely consulted local health workers with regard to child feeding. (DP-E)

10336 **Chen, L.C., Huq, E., Huffman, S.L.** *Prospective study of the risk of diarrheal diseases according to the nutritional status of children.* American Journal of Epidemiology (Baltimore, Md), 114(2), 1981, 284-292. Engl. 22 refs.

Two prospective studies were carried out in Matlab, Comilla, Bangladesh, in order to test the hypotnesis that malnutrition predisposes to diarrhea. Anthropometric data from 2 019 children aged 12-23 months were correlated with data on hospitalization for diarrhea during the following 24 months. In addition, 207 children were nutritionally classified according to weight-for-age and their diarrheal attack rate in the field was followed by means of monthly visits for a year. Both studies failed to demonstrate an association between nutritional status defined by anthropometry and subsequent risk of diarrheal disease. This paper discusses the study findings, strengths, limitations, and implications for public health interventions. (HC-L)

10337 **Chew, K.K., Heng, A.** *Gynaecological problems seen at emergency operations in a general surgical unit.* Annals of the Academy of Medicine of Singapore (Singapore), 10(2), Apr 1981, 201-202. Engl.

A survey of the records of 597 female emergency patients operated on at Singapore's Tan Tock Seng Hospital from September 1, 1979-August 31, 1980 revealed that 36 (6%) were admitted for gynaecological problems, mainly ectopic pregnancy. The results are discussed and presented as statistical data. It is suggested that emergency care physicians remain alert to the possibility of gynaecological causes for female admissions. (DP-E)

10338 **Das, K.K., Sen, A.K., Rahman, A., Mukherjee, P.K.** *Seasonal variation of infant deaths in an urban locality of Calcutta.* Archives of Child Health (Bombay, India), 22(6), 1980, 134-141. Engl.

Infant mortality statistics from 1957-1974 were analyzed in Calcutta, India, in order to study the factors, particularly seasonality, contributing to the deaths of children aged less than 1 year. The results are discussed and presented as statistical data. While slum children experienced higher death rates generally, no seasonality in post-neonatal mortality could be discovered. (DP-E)

10339 **Dawson, C.R., Daghfous, T., Hashiwara, I., Ramdhane, K., Kamoun, M.** *Trachoma therapy with topical tetracycline and oral erythromycin: a comparative trial.* Bulletin of the World Health Organization (Geneva), 60(3), 1982, 347-355. Engl. 32 refs.

With an aim to evaluating the efficacy of systematic chemotherapy of endemic trachoma, a study comparing oral erythromycin ethyl-succinate and topical 1% tetracycline (ointment) treatments was undertaken in four villages in the Douz region of Tunisia. They involved 169 children aged 6-8 years with severe-to-moderate-intensity trachoma. Divided into two matched groups, the children received the respective medications twice daily over a 3-week period. The effect of treatment was evaluated by observing the changes in clinical intensity of inflammation and the prevalence of bacterial pathogens by culture and in smears. The results are discussed at length, with the presentation of the case histories of four subjects to illustrate the interaction of treatment and ocular chlamydial and bacterial infection. Five tables of data from the study are included. (EB)

10340 **Delgado, H.L., Martorell, R., Klein, R.E.** *Nutrition, lactation, and birth interval components in rural Guatemala.* American Journal of Clinical Nutrition (Bethesda, Md.), 35(6), Jun 1982, 1468-1476. Engl. 26 refs.

The effects of maternal nutritional status and food supplementation ingested by the infant on the duration of postpartum amenorrhea and on the duration of the menstruating interval were examined in this comparative study and nutrition programme involving 1 106 Guatemalan village women who gave birth from January 1969-September 1977. A significant negative association was found between the nutritional status of the mother during the 3rd trimester of pregnancy and infant supplementation, on the one hand, and the length of postpartum amenorrhea on the other. The results support the hypothesis that maternal nutritional status, by determining the amount of breast milk available, is negatively associated with the length of postpartum amenorrhea. Furthermore, no association between maternal nutritional status and the length of the menstruating interval was found. Statistical data are included. (Modified journal abstract)

10341 **Desjeux, P., Dereuin, F., Waroquy, L., Dedet, J.P.** *Ecologie d'un foyer de leishmaniose cutanée au Sénégal; structure et hypothèse de fonctionnement. (Ecology of a cutaneous leishmaniasis focus in Senegal; structure and hypothetical functioning).* Afrique Médicale (Dakar), 20, Aug-Sep 1981, 427-432. Fren. 15 refs.

The history of cutaneous leishmaniasis in Senegal is followed by a description of local conditions and methods of the present study, which was carried out from April 1977-December 1980 in the Keur-Moussa region and involved the collection of 11 species of *Phlebotominae* (a total of 4 741 males and 6 101 females). The finuings of the dissection of 689 females of *P. duboscqi* and the examination of 144 rodents are discussed. Sixty cases of leishmaniasis in humans were registered in the study area. Leishmania major is regarded as the causative agent. Seasonal variations affecting *P. duboscqi* and human leishmaniasis are examined. (EB)

10342 **Dethlefs, R.F.** *Glaucoma in Port Moresby, Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 25(2), Jun 1982, 104-107. Engl.

Because of the lack of recorded information about different types of glaucoma in Papua New Guineans, a study of eye clinic records for 2 years at Port Moresby General Hospital was undertaken, revealing a total of 48 cases

diagnosed as glaucoma (11 non-Papua New Guineans, 37 Papua New Guineans). Chronic open angle glaucoma was found in 7 of the former, while trauma (18 cases) was the most common cause of glaucoma in latter. The visual effect of the glaucomas is different in the two groups: both eyes were affected in 8 of 11 non-Papuans but only in 7 of the 37 in the native sample. There is a virtual absence of non-painful glaucoma and a preponderance of unilateral glaucoma in this South Pacific island. (EB)

10343 **Devadas, R.P., Chandrasekhar, U., Bhooma, N.** *Nutrition counselling of women who participated in a feeding trial.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(5), May 1982, 141-145. Engl.

Twenty-five women in the 2nd trimester of pregnancy from two Indian villages, Gavanoor and Gudalur Kavundampalayam, participated in a nutrition counselling and feeding trial aimed at helping mothers utilize low-cost indigenous food combinations. A control group of 25 expectant mothers from the same socioeconomic status and trimester of pregnancy and not participating in any feeding programme was used for comparison, with all mothers being studied for a period of up to 18 months of lactation and the infants from birth to age 42 months. Four tables of data are used in the discussion of the findings, which showed that wrong food beliefs and practices could be corrected through nutrition counselling. (EB)

10344 **Devadas, R.P., Chandrasekhar, U., Bhooma, N.** *Nutritional outcomes of a rural diet supplemented with low cost locally available foods; I: impact on expectant women.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(4), Apr 1982, 111-116. Engl.

A 5-month feeding programme in two Indian villages provided on-the-spot supplements based on either rice or *ragi* to 50 pregnant women; the results are discussed and presented as statistical data. It was found that the programme participants gained 7.92 kg and 7.96 kg on the rice and *ragi* diets, respectively, compared to the 5.98 kg gained by 25 expectant mothers in a control group; the infants born to the programme groups weighed an average of 2.82 kg at birth, compared to 2.50 kg for the control babies. Both these diets are recommended for use in nutrition programmes. (DP-E)

10345 **Devadas, R.P., Chandrasekhar, U., Bhooma, N.** *Acceptability of diets based on low cost locally available foods for various target groups.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(1), Jan 1982, 1-7. Engl.

In this Indian feeding trial, menus using either rice- or *ragi*-based mixtures were planned to meet two-thirds of the nutritional requirements of preschool children, schoolchildren, expectant women, lactating mothers, and their children. The recipes were standardized and their adequacy and acceptibility tested. It was found that these menus were both adequate in quantity and were acceptable to all the age groups. Standardization of ready-to-eat mixtures indicated that they were not accepted as well. Statistical data are included. (Modified journal abstract)

10346 **Dewolfe Miller, F., Hussein, M., Mancy, K.H., Hilbert, M.S., Monto, A.S.** *Epidemiological study of* Schistosoma haematobium *and* S. mansoni *infection in thirty-five rural Egyptian villages.* Tropical and Geographical Medicine (Amsterdam, Netherlands), 33(4), Dec 1981, 355-365. Engl. Refs.

Stool and urine samples from 11 337 individuals in 35 villages in the rural Egyptian Nile Valley were examined for the presence of schistosome ova. The results are discussed and presented as statistical data. Prevalence rates for *Schistosoma mansoni* and *S. haematobium* varied widely between regions and, in Aswan, between villages. Age-sex distributions were characteristic with a notable increase in male infection from north to south. The source of domestic water supply and prevalence of infection were consistently associated. (Modified journal abstract)

10347 **Dickerson, J.W., Lee, H.A.** *Nutrition in the clinical management of disease.* London, Edward Arnold, 1978. 409p. Engl. Refs.

Written to provide clinicians of most specialties with an up-to-date account of current practice in the application of knowledge of nutrition to patient care, this book contains 16 chapters by researchers and dieticians. The fundamentals of the subject have been integrated with discussions of the pathophysiology and treatment of disease. The following areas are covered: nutrition during childhood; inborn errors of metabolism in children; protein-energy malnutrition; nutrition in the elderly; obesity and anorexia nervosa; nutrition in relation to diabetes, cardiovascular, and alimentary tract diseases; renal, liver, and gall bladder disorders; anaemias and coagulation disorders; tube feeds; and parenteral nutrition. Numerous tables and bibliographies are included. A comprehensive appendix provides some commonly-used diets. (EB)

10348 **Diesfeld, H.J.** *Health research in developing countries.* Frankfurt am Main, Germany FR, Peter D. Lang, Medizin in Entwicklsländern Series, Vol. 11, 1982. German.
Proceedings of the Joint Meeting of the Tropical Medical Societies of Belgium, Germany, and the Netherlands, Heidelberg, Germany FR, 1982.

This monograph consists of the 15 papers presented at a joint meeting of tropical medical societies from Belgium, Germany, and the Netherlands, which examined the human issues and sociocultural factors that limit the application of medical knowledge. Section 1 on health services research looks at health care utilization by Ecuador's indigenous people, costs of comprehensive primary care in Zaire's Kasongo Project, preference and rejection in the choice of health care providers by Kenya's Akamba tribe, and continuous training of medi-

cal auxiliaries by supervision. The 2nd part on medical anthropology discusses medical pluralism and doctor-patient relationships in India, developments in traditional Indian nosology, and Naeng — a Korean folk illness. Topics in the 3rd section include nutrition of settlers in Thailand, child nutritional status in Central Africa, food consumption during pregnancy in Kenya, and interrelationships of anthropometric parameters. Non-parasitic infectious diseases are the subject of the final section, which looks at enterotoxic bacteria induced diarrheal diseases, ebola virus, and lassa virus in Liberia. Numerous statistical tables, graphs, and bibliographies are included. (EB)

10349 Dimpudud, A.J., Gandahusada, S., Gunawan, S. *Determination of chloroquine-resistant falciparum malaria in Nimboran, Irian Jaya.* Jakarta, Ministry of Health, 1981. 6p. Engl.

With an aim to determining the susceptibility of *Plasmodium falciparum* to chloroquine in Nimboran, Indonesia, 21 *in-vivo* and 28 macro *in-vitro* tests were performed in August 1979. Two resistant cases of the RI and RIII type with the *in-vivo* test and 5 resistant cases with the *in-vitro* test were detected. A number of factors that may have contributed to the high failure rate (57%) by the macro *in-vitro* method are discussed. It is suggested that efforts be undertaken to prevent the further spread of drug-resistant falciparum cases in this and other areas of Indonesia. (EB)

10350 Dixon, K.E., Llewellyn, C.H., Travassos da Rosa, A.P., Travassos da Rosa, J.F. *Multidisciplinary program of infectious disease surveillance along the Transamazon Highway in Brazil: epidemiology of arbovirus infections.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(1), 1981, 11-25 Engl. Refs.
Also published in Portuguese in *Boletin de la Oficina Sanitaria Panamericana.*

A programme of epidemiological surveillance was conducted from 1974-1976 along the Transamazon Highway in Brazil's Para state among a population of approximately 300 randomly-selected families (1 600 persons). Blood and serum samples were collected and processed for virus isolation, individual interviews were conducted, and episodes of illness were documented. This report presents serologic data that was obtained on a number of viruses. It also assesses the relationship of antibody prevalences to several environmental variables. Among other results, a clearcut and consistent relationship was documented between age and sex on the one hand and the acquisition of arbovirus antibodies on the other. Statistical data are included. (Modified journal abstract)

10351 El-Angbawi, M.F., El Samad Younes, S.A. *Periodontal disease prevalence and dental needs among schoolchildren in Saudi Arabia.* Community Dentistry and Oral Epidemiology (Copenhagen), 10(2), Apr 1982, 98-99. Engl.

A dental health study of 1 174 Saudi schoolchildren (593 male) aged 13-15 years revealed that boys had significantly higher debris, calculus deposits, and intense gingivitis counts than the girls examined, although there were no differences in advanced periodontal involvement. The results are briefly discussed and presented as statistical data. (Modified journal abstract)

10352 Fagbami, A.H., Anosa, V.O., Ezebuiro, E.O. *Hospital records of human rabies and antirabies prophylaxis in Nigeria, 1969-78.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(6), 1981, 872-876. Engl. Refs.

Analysis of 10 years of data collected from 38 Nigerian hospitals and 5 epidemiological units covering some 37% of the population revealed 169 deaths from rabies; 7 549 patients received anti-rabies treatment, usually 14-21 doses of Semple or duck embryo vaccine. About 99% of cases, which were more frequent among males, children, and lower socioeconomic groups, were attributed to dogs. Recommendations are made for improving vaccine supplies and diagnostic centres. (Modified journal abstract)

10353 Farah, A.A., Preston, S.H. *Child mortality differentials in Sudan.* Population and Development Review (New York, N.Y.), 8(2), Jun 1982, 365-383. Engl. Refs.

Sudan's 1973 census and the Changing Africa Family Program provide most of the data used in this analysis of child mortality in different regions of that country. Factors studied include maternal education, region of residence, father's occupation, mother's place of birth, and characteristics at time of survey. Suggestions for further research are put forth. Statistical data are included. (DP-E)

10354 Feery, B. *Impact of immunization on disease patterns in Australia.* Medical Journal of Australia (Sydney), 2(4), Aug 1981, 172-176. Engl. Refs.

This is a general review of the decrease in infectious diseases in Australia. Sanitation, clean water, nutrition, housing, and antibiotics have all contributed, but vaccines have also been of crucial importance. The author relates the decline in the death rate from diphtheria, poliomyelitis, tetanus, pertussis, and measles, and the reduced incidence of some of these diseases, to the introduction of vaccines in Australia. Statistical data are included. (Modified journal abstract)

10355 Fekadu, M. *Rabies in Ethiopia.* American Journal of Epidemiology (Baltimore, Md.), 115(2), 1982, 266-273. Engl. 30 refs.

Rabies is one of the most severe infectious diseases in Ethiopia, with many cases of the disease diagnosed in various parts of the country. The dog is the species most responsible for human exposure with over 98% of the human cases and vaccinations due to the bite of rabid or suspected rabid dogs. Most of the treatments are due to stray dogs that bite, escape, and are not available for observation. Most of the people who die of rabies are

males aged less than 40 years. Statistical data are included. (Modified journal abstract)

10356 Ferraroni, J.J., Speer, C.A., Hayes, J., Suzuki, M. *Prevalence of chloroquine-resistant falciparum malaria in the Brazilian Amazon.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(3), May-Jun 1981, 526-530. Engl. 31 refs.

Blood samples obtained from 93 patients with *Plasmodium falciparum* living at 28 different sites in the Brazilian Amazon were tested *in vitro* for sensitivity to chloroquine. After 24 hours of incubation, tropnozoites of *P. falciparum* developed into schizonts in all control cultures (no chloroquine) as well as in 80.6%, 48.4%, 11.8%, and 7.5% of the cultures containing 0.5, 1.0, 2.0, and 3.0 mmol chloroquine:ml blood, respectively. Chloroquine-resistant *P. falciparum* strains are therefore widespread in the Amazon and further mass administration of antimalarial drugs without proper supervision should not be considered an effective means of long-term malaria control. (HC-L)

10357 Furmenko, I.P., Grosheva, T.N., Luzhkov, B.N. *Kompleksnaja social'no-gigieniceskaja harakteristika serdecno-sosudistoj patologii sel'skogo naselenija. (Complex social and hygienic characteristics of cardiovascular pathology in the rural population).* Sovetskoe Zdravookhranenie (Moscow), 10, 1982, 25-30. Russ. 13 refs.

This paper discusses the results of a study of the rural population of the Voronezh region of the USSR, in which the frequency of disability, morbidity, and mortality from the major diseases of the vascular system were analyzed and compared. Ischemic and other heart diseases appear to be as frequent in the rural as in the urban population; standardized mortality, however, was 7% higher in rural communities. Here, also, primary and general disability rates were higher, especially in able-bodied persons. A correlation between these indices and a number of factors determining a mode of life in a modern rural community was developed from the present study. (Modified journal abstract)

10358 Gandahusada, S. *Distribution and prevalence of Malayan filariaris in South Sulawesi, Indonesia.* Jakarta, National Institute of Health Research and Development, 1980. 7p. Engl.

Malayan filariasis continues to be a major health problem in Indonesia, especially in rural areas. This paper provides tables of data from filariasis surveillance carried out in 82 villages in South Sulawesi between 1972-1978. The findings are listed in terms of sex, region, indigenous populations, and transmigrants. (EB)

10359 Gazgarosa, E., Tawil, M., Zurayk, H. *Effect of urban versus rural residence and of maternal education on infant health in south Lebanon.* Journal of Epidemiology and Community Health (London), 36(3), Sep 1982, 192-196. Engl.

In this July 1977 study, 253 rural and urban Lebanese women were visited 18 months after delivery to collect data on reproduction patterns, infant feeding, and health services utilization. The findings, discussed and presented as statistical data, show that urban and educated women were better off in terms of family formation patterns, immunization, and well baby care, thus indicating the need for the education of rural women, although health education programmes emphasizing breast-feeding and preventive care are recommended for all areas. A more diversified health care delivery system relying more on auxiliaries is also recommended. (Modified journal abstract)

10360 García, R.V., Escudero, J.C. *Constant catastrophe: malnutrition, famines and drought.* Oxford, Pergamon Press, Drought and Man: the 1972 Case History, Vol. 2, 1982. Engl. Refs.

Health and nutrition studies undertaken in various regions since the 1972 drought and subsequent famine indicate that these disasters were merely an aggravation of previously existing and already precarious nutritional situations. The study reports contained in this volume examine the impact of drought and other climatic anomalies on nutrition; the consequences, distribution, and measurement of human malnutrition; the population-resources balance; and responses to drought-induced national disasters. Case studies are included from the Sahel, Ethiopia, India, the People's Republic of China, the UK during World War II, Argentina, and Brazil. Some suggestions for action are presented in the closing chapter. There is an index and many papers contain statistical data. (RMB)

10361 Gardiner, P. *Age patterns of mortality in Indonesia (an analysis of results of the Indonesian sample vital registration project 1974-1977).* Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, 1977. 51p. Engl. 28 refs. See also 10205.

The Sample Vital Registration Project was carried out by the Central Bureau of Statistics between 1974-1977 in 10 regions throughout Indonesia, covering 250 000 persons. It used two independent data collection systems: continuous vital registration and a semi-annual retrospective survey. Thirteen tables of data are presented in this analysis of the project results concerning the country's mortality patterns. The author concludes that, despite the project's limitations and the difficulties in explaining the variations observed in the data, this source of information should not be overlooked. (EB)

10362 Geudrowahyuhono, S.W. *Preliminary study of enterovirus infection among children in Purwakarta, West Java, Indonesia.* Jakarta, Ministry of Health, National Institute of Public Health, 1981. 4p. Engl.

In a 1978-1979 study of enterovirus infections among infants and children to determine whether poliomyelitis vaccine is needed in Indonesia, 785 randomly-chosen healthy children aged 6 months-5 years from low-income families in West Java were tested, 381 for antibodies

against poliovirus antigens and 404 for virus isolation. It was revealed that 77.5% of preschool children in Purwakarta had become infected with the three types of poliovirus by the age of 5 years; 20.4% of those aged 6 months-2 years were devoid of antibodies to all three types. Of the 404 fecal specimens tested, virus was isolated from 66 samples (16.3%). It is suggested that routine vaccination be implemented and directed at children aged less than 2 years, especially during the months of September to March. (EB)

10363 Goh, K.T., Doraisingham, S., Yin-Murphy, M. *Epidemic of acute conjunctivitis caused by enterovirus-70 in Singapore in 1980.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 12(4), Dec 1981, 473-480. Engl. Refs.

During a 1980 epidemic of conjunctivitis in Singapore, 100 patients from two government clinics were examined for ophthalmic, respiratory, gastrointestinal, and systemic manifestations. The results are discussed and presented as statistical data. The patients were mainly young adults and children from all ethnic groups, most of whom contracted the infection at home, probably by indirect transmission. A study of 113 home contacts in 20 families revealed a secondary attack rate of 72.6%. Health education programmes stressing simple personal hygiene are recommended during such outbreaks. (DP-E)

10364 González, L.T., Gevaña, O.M., Picar, B.A., Florentino, R.F., Solón, F.S. *Nutritional baseline evaluation of Kapitbahayan.* Philippine Journal of Nutrition (Manila), 33(2), Jan-Mar 1980, 29-35. Engl.

The Kapitbahayan settlement in Navotas, Philippines, is a cooperative project sponsored by several agencies whose aim is to improve the quality of life of families that came from the congested portion of Tondo. In a baseline nutrition survey, 543 preschoolers were weighed and examined and a group of preschoolers, pregnant women, and lactating mothers were tested for haemoglobin levels. Briefly, 9% of the preschoolers were found to be moderately to severely underweight and 1% had symptoms of vitamin A deficiency; of those tested for haemoglobin levels, 45% of the preschoolers, 22% of the pregnant women, and 13% of the nursing mothers were deemed anaemic. An appropriate nutrition programme has been started and will be the subject of another report. (HC-L)

10365 Grell, G.A., Dessi, P., Watty, E., Muller, R., Serjeant, G.R. *Survey of parasites in primary school children in Dominica, West Indies.* Annals of Tropical Paediatrics (Liverpool, UK), 1(3), 1981, 155-160. Engl. 13 refs.

A study of 1 000 Dominican schoolchildren aged 4-12 years showed that infection with gastrointestinal parasites was very common. *Trichuris* was found in the stools of 92% of the children, *Ascaris* in 38%, *Necator* in 11%, *Giardia* in 18%, and *Entamoebia histolytica* in 1%. In spite of the high prevalence of parasites, the general health of the children studied was remarkably good and only 18 were found to have a haemoglobin level below 10 g/dl. Statistical data are included. (Modified journal abstract)

10366 Grell, G.A., Dessi, P., Serjeant, G.R., Muller, R. *Anthropometric measurements of school children in Dominica, West Indies.* Annals of Tropical Paediatrics (Liverpool, UK), 1(4), 1981, 241-243. Engl. 8 refs.

In a September 1975 study in Dominica, the West Indies, the heights and weights of 997 children of African descent aged 4-12 years showed that they were still below WHO reference standards. In spite of the fact that the island was relatively undeveloped economically in comparison with neighbouring Jamaica in the Caribbean basin, there were no significant differences between the growth of children in the two countries. Statistical data are included. (Modified journal abstract)

10367 Grover, I. *Effect of dietary intake, maternal factors and socio-economic factors on birthweight of infants in rural Haryana.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(3), Mar 1982, 80-86. Engl. 10 refs.

A study of 114 expectant mothers from Haryana state, India, used the oral questionnaire method of food intake recall to assess the effect of diet, plus maternal and socioeconomic factors, on birth weight. The results are discussed and presented as statistical data. The diet during the 2nd half of pregnancy was found to have a considerable effect on birth weight, especially when there were shortages in energy, calcium, and vitamins A and C. Birth weight also tended to increase with maternal age (up to 36 years), parity, and gestation, as well as being influenced by income and educational level. (DP-E)

10368 Gubler, D.J., Eram, S., Jumali, Setiabudi, Y., Sadono, T.I. *Dengue hemorrhagic fever in Bantul, Jogyakarta, Indonesia.* Jakarta, Ministry of Health, 1979. 10p. Engl. 24 refs.

Since the 1st major epidemic of dengue hemorrhagic fever (DHF) in Indonesia in 1973 (affecting an estimated 7 000 persons), several smaller outbreaks have occurred in both rural and urban centres. This paper reports on the clinical, virological, epidemiological, and entomological information gathered from November-December 1976 when 126 cases of DHF in rural Bantal, Central Java, were investigated. The cases ranged in severity from undifferentiated fever to shock and death, with a fatality rate of 3.1% among the 97 (73%) confirmed cases of dengue infection. The breeding habits and sites of the principle vectors, *Aedes aegypti* and *Aedes albopictus*, and the larval mosquito survey are described. Twelve tables of data from the study are presented. (EB)

10369 Gueri, M., Jutsum, P.J., Sorhaindo, B. *Anthropometric assessment of nutritional status in pregnant women: a reference table of weight-*

for-height by week of pregnancy. American Journal of Clinical Nutrition (Bethesda, Md.), 35(3), Mar 1982, 609-616. Engl. 34 refs.

A reference table of weight-for-height by week of pregnancy has been devised on theoretical grounds, based on the premises that the average increment of weight during pregnancy is 20% of the prepregnant weight and that almost all the increment takes place linearly during the 2nd and 3rd trimester of pregnancy. The table was tested in Dominica with retrospective clinic and hospital data. The results show a good correlation between the weight-for-height at different stages of pregancy as a percentage of the reference table and the birth weight of the newborns. This table can be a useful tool to assess the nutritional status of pregnant women and, with limits, to predict the chances of delivering a low-birth-weight infant. (Modified journal abstract)

10370 Gujral, S., Rajbhandari, R. *Dietary habits and infant feeding practices of Nepalese lactating mothers*. Indian Journal of Nutrition and Dietetics (Coimbatore, India), 18(12), Dec 1981, 365-371. Engl. 9 refs.

A 2-day dietary survey of 100 lactating Nepalese mothers of infants aged less than 1 year collected data on food consumption and preference and on infant feeding practices. The results are discussed and presented as statistical data. In general, it was found that, within economic and cultural limitations, the mother's diet was adequate in terms of energy and protein; they also tended to breast-feed for an average of 12-24 months. (DP-E)

10371 Gutiérrez Muñiz, J.A., Riverón Corteguera, R. *Mortalidad prescolar en las Américas en el decenio 1970-1979: la situación en Cuba. (Preschool mortality in the Americas in the decade 1970-1979: the Cuban situation)*. Revista Cubana de Administración de Salud (Havana), 7(4), Oct-Dec 1981, 419-433. Span. 30 refs.

Preschool mortality figures from Cuba for the years 1970-1979 are examined and compared with similar data from other Latin and North American countries and changes in the 20 principal causes of death are noted. During the decade, preschool mortality declined from 1.3-1.0:1 000 children aged 1-5 years and accidents relaced respiratory ailments as the primary cause of death, bringing the pattern of young child mortality closer to that found in the developed countries. The aspects of Cuban society deemed responsible for these improvements are briefly considered. (HC-L)

10372 Haile-Meskal, F., Abdulahi, Y., Eshete, H. *Disruption of bilharzia transmission in the Kortume flood plain of the Awash Valley, Ethiopia*. Ethiopian Medical Journal (Addis Ababa), 19(4), 1981, 117-121. Engl.

Ten endemic sites in the Kortume flood plain between Anglele and Halidebi in eastern Ethiopia were chosen for extensive search for active transmission of *Schistosoma haematobium* carried out in pre- and post-rain periods of 1980. No live specimen of *Bulinus (Physopsis) abyssinicus*, the intermediate host of bilharzia, was found. Only empty shells of this species and of *Lymnaea natalensis* were found in previously suspected transmission sites. The authors conclude that there appears to be a breakdown of active transmission of the parasite in the study area and recommend intervention measures, e.g. mass diagnosis and treatment of all positive cases and improvements to irrigation and drainage canals, which would aid in controlling urinary bilharzia. (EB)

10373 Haller, L., Lauber, E. *Santé de l'enfant d'âge scolaire en Côte d'Ivoire; aspects de santé publique, de croissance et de nutrition en relation avec les infections parasitaires. (Health of Ivory Coast schoolchildren; public health aspects, nutrition, and growth in connection with parasitic diseases)*. Acta Tropica (Basle, Switzerland), 37(4), 1980, Supplement 11, 5-132. Fren. Refs.

This monograph reports the results of examinations of 430 children aged 5-15 years living in 4 villages of the forest region of the Ivory Coast, in which basic anthropometric and haematological data and vitamin status were determined and the evolution of the nutritional status was assessed in relation to parasitic infection and diet. Geographic and demographic aspects, social and ethnic background, and epidemiological data on primary tuberculosis, toxoplasmosis, cytomegaly, and hepatitis are presented. A control group of non-treated children was used for comparison. The findings of the following examinations, carried out between 1976-1977, are discussed with the use of tables and graphs: antiparasitic treatment for intestinal helminths and schistosomiasis, quantitative parasitological survey, serological tests, and biochemical determination of vitamin status. Comprehensive bibliographies are included. (EB)

10374 Harjadi, M.M. *Potential contribution of home gardening to nutrition intervention programs in Indonesia*. Bogor, Indonesia, Bogor Agricultural University, 1975. 20p. Engl. 17 refs.
Seminar on Food and Nutrition, Jogyakarta, Indonesia, 28-30 Apr 1975.

With reference to several previous studies on food requirements and garden productivity in Indonesia, the author looks at the following: the potential role of the home garden in Java; types of crops planted; value of products sold (in terms of rupiah per day) and consumed by various levels of society; and average daily nutrient intake. Some methods for improving cultivation techniques and productivity of the home garden are outlined and a number of recommendations are put forward. These include: teaching nutrition education to encourage demand and production; encouraging the cultivation of particular foods to increase caloric, vitamin, and protein intake; and promoting the use of grafted and budded seedlings of fruit trees and the use of pot culture in compacted yards. (EB)

10375 **Harper, A.E., Davis, G.K.** *Nutrition in health and disease and international development; symposia from the XII International Congress of Nutrition.* New York, Alan R. Liss, Inc., 1981. 1034p. Engl.
Twelfth International Congress of Nutrition, San Diego, Cal., 16-21 Aug 1981.
This collection of papers presented at an international congress on nutrition is divided into six areas: biochemical nutrition (nutrient utilization and requirements); malnutrition and evaluation of nutritional status; nutritional anthropology and epidemiology, including nutrition intervention; nutrition in growth and development, aging, and disease; gastrointestinal function and animal nutrition; and nutrition in national policy. The majority of the papers contain graphs and/or charts, and references. (DVK)

10376 **Hart, G.** *Syphilis control in populations previously exposed to yaws.* International Journal of Epidemiology (Oxford, UK), 11(2), 1982, 181-187. Engl. 9 refs.
Application of an epidemiological strategy, involving repeated annual screening, public relations activities, and treatment to selected groups, for syphilis control in four communities of Australian Aborigines is described. The predictive value of the Venereal Disease Research Laboratory (VDRL) screening test was influenced by the titre of the test and the age and location of individuals on whom it was performed. The predictive value of 1:8 VDRL titres (for active syphilis) varied from zero in individuals aged more than 50 years in one community to 0.96 in individuals aged 10-29 years in another. Reduction in transmission of infection was closely related to the degree of screening coverage of local and adjacent communities. Statistical data are included. (Modified journal abstract)

10377 **Hassan, M.M.** *Changing patterns of protein-calorie malnutrition in the Sudan.* In Proceedings of the Eleventh International Congress of Nutrition, Rio de Janeiro, Brasil, Sociedade Brasileiro de Nutrição, 1978, p.177-184. Engl.
Eleventh International Congress of Nutrition, Rio de Janeiro, Brazil, 27 Aug-1 Sep 1978.
Socioeconomic, cultural, and psychological factors affecting the marked increase in incidence of protein-calorie malnutrition and marasmic-kwashiorkor among infants and children in the Sudan during the last 5 years are examined. With the trend, especially among urban women, towards bottle-feeding appearing to be a major factor in the changing patterns of disease and nutrition, the infant feeding patterns of 170 mothers with various socioeconomic backgrounds were studied. The inability and reluctance of working mothers to breast-feed their infants, the widespread use of contraceptive pills, and the increased advertising and distributing of powdered milk and supplemented artificial feeds are among the reasons for the general decline in breast-feeding. The paper includes nine tables of data from the study. (EB)

10378 **Hoorweg, J., Niemeijer, R.** *Nutritional impact of the pre-school health programme at three clinics in Central Province, Kenya.* Leiden, Netherlands, African Studies Centre, Research Reports, No. 11, 1980. 69p. Engl. 38 refs.
This report studies the effects of the Pre-School Health Programme (a nutrition programme organized by Catholic Relief Services for Kikuyu children aged 6 months-5 years) at three Kenyan clinics as ascertained by interviewing their mothers. Both long-term participants and recent attenders were assessed in terms of nutritional knowledge, maternal food preferences, food consumption of the children during the previous day, and children's nutritional status. It was found that both programme components — nutrition education and the distribution of food rations — had discernible effects, although the latter is considered somewhat stronger. Copious statistical data are included. (DP-E)

10379 **Hu, C.K., Zhang, C.Z., Li, C.H., Sun, Z.Z., Wang, D.L.** *Achievements in syphilis, leprosy and tinea capitis control in new China.* Chinese Medical Journal (Beijing), 95(2), Feb 1982, 109-112. Engl.
Progress in the People's Republic of China since 1949 in the eradication of syphilis, leprosy, and tinea capitas is briefly described. While syphilis was declared eradicated in 1964, it is hoped that the other two will have disappeared by the end of the century. Statistical data are included. (DP-E)

10380 **Hull, B.P., Spence, L., Bassett, D., Swanston, W.H., Tikasingh, E.S.** *Relative importance of rotavirus and other pathogens in the etiology of gastroenteritis in Trinidadian children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(1), Jan-Feb 1982, 142-148. Engl. 24 refs.
Over a 2-year period, 300 infants aged less than 3 years with gastroenteritis who were admitted to hospitals in Trinidad were investigated for the presence of certain microorganisms in the feces, along with an equal number of age- and sex-matched controls. Rotavirus was detected in 23% and 1% respectively; *Salmonella* in 7% and 1%; *Shigella* in 4% and 0%; and the *Escherichia coli* in 7% and 2%. Rotaviruses were detected throughout the year but were more prevalent in the dry than in the rainy season. They were found less often in children aged less than 6 months than in those aged 6-35 months and were present in 6 of the 20 children who died. (Modified journal abstract)

10381 **Hull, T.H.** *Estimates of Indonesian fertility rates for 1975.* Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, n.d. 18p. Engl.
Based on the 1976 Indonesian Intercensal Survey in which all ever-married women who had reported having at least one live birth were asked to supply the month and year of their last live birth, this paper discusses how these figures can serve as the basis for calculating the

crude birth rate, age-specific fertility rate, and total fertility rate, despite possible inaccuracies in the data collected. Five tables of survey data are analyzed. In his conclusion the author cautions the reader on accepting too easily the findings that fertility is declining in fairly large proportions and on attributing precise values and simple interpretations to this inherently complex process. (EB)

10382 Hull, T.H. *Estimate of infant mortality in Indonesia in 1975.* Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, 1978. 13p. Engl. 8 refs.

The "Brass Method", a widely-used technique for estimating infant mortality in Indonesia, uses a multiplying factor associated with the pattern of reported cumulative fertility. Because there has been little empirical work done on the strength of the approach under conditions of declining fertility and rising age of marriage, it is important to examine this method for any weaknesses that may result in substantial errors of estimation. This paper explores an alternative approach to mortality estimation and shows that this method can produce relatively close estimates to those resulting from the Brass technique. The relative strengths and weakness of the proposed method are discussed and comments on its potential for further development and application are made. (EB)

10383 Husaini, H. *Improving the nutritional status of preschool children by supplementing adequate calories.* Bogor, Indonesia, Ministry of Health, 1982. 8p. Engl. 15 refs.

With protein-calorie malnutrition estimated at between 25%-40% among preschool children in Indonesia, a 4-month study of 140 preschoolers was carried out in a rubber plantation in West Java. The children were divided into four groups as follows: (1) control group, (2) those who received an additional 500 calories and 4 gm protein daily, (3) those who received an additional 500 calories and 20 gm protein daily, and (4) those who received an additional 500 calories and 20 gm protein daily and nutrition education. The findings revealed that the primary deficit of the dietery intake was in calories, not in protein. An adequate diet, rich in calories and composed of locally available foodstuffs, is required. Four tables of data from the survey are included. (EB)

10384 Imran, L. *Epidemiological studies of dengue hemorrhagic fever in Indonesia, 1975-1976.* Jakarta, National Institute of Health Research and Development, 1979. 7p. Engl.

In a 1976 study to determine distribution and transmission patterns of dengue hemorrhagic fever (DHF) in large communities, a sero-epidemiological survey was undertaken in Jepara, Surakarta, and Ujung Pandang in Indonesia. Blood was collected from 1 123 children aged 6-7 years. Dengue infections rate was 81.9%, 81.5%, and 88.9% respectively in the three cities. In a 2nd test of 326 children aged 5-6 years, the infection rate was lower, possibly due to the smaller risk of exposure in this group than in those children already at school. It appeared that transmission was higher in shopping areas than in housing areas regardless of population density. Four tables of data from the study are presented. (EB)

10385 India, Ministry of Agriculture, Department of Food, Food and Nutrition Board, Working Group on Fortification of Salt with Iron. *Use of common salt fortified with iron in the control and prevention of anemia — a collaborative study.* American Journal of Clinical Nutrition (Bethesda, Md.), 35(6), Jun 1982, 1442-1451. Engl. 21 refs.

In large-scale field trials in three rural areas and one urban area of India (each with 4 000-6 000 inhabitants), the efficacy of iron-fortified salt in the control and prevention of anaemia was investigated. The results are discussed and presented as statistical data. After 12-18 months of consumption, a significant reduction in the Hb-levels and a significant reduction in the incidence of anaemia were observed in all areas, even in one area where there was a high incidence of hookworm infestation. (Modified journal abstract)

10386 Indonesia, Ministry of Health. *Household survey in the regency of Karanganyar (central Java) (5 November-15 December 1973); project strengthening of a kabupaten health service.* Jakarta, Ministry of Health, 1973. 19p. Engl. 9 refs.

With an aim to developing a more effective and efficient delivery of health care services in the region of Karanganyar (Central Java) Indonesia, a pilot project was set up whereby 3 249 sample households were surveyed using interviews and questionnaires. This report describes and summarizes the findings in 8 tables. The following areas are examined: age, sex, occupation, education and marital status of occupants; family size; crude birth and death rates; pregnancy; delivery; case of death; utilization of health care facilities; morbidity patterns; family planning; knowledge, attitudes, and practices; and environmental aspects of households. (EB)

10387 Iskandar, M., Jones, G.W. *Effect of infant and child mortality on subsequent fertility in Indonesia.* Jakarta, University of Indonesia, Faculty of Economics, Demographic Institute, 1977. 35p. Engl. 10 refs.

The data on rural and urban women collected for the 1973 Indonesian Fertility and Mortality Survey form the basis of this monograph in which the author analyzes the impact of infant and child mortality on subsequent fertility and the birth intervals among women within the high infant and child mortality environment. Evidence showed that there is a tendency to compensate for the relatively high mortality levels by keeping fertility levels high. It is suggested that further studies be conducted to examine whether there is overcompensation or undercompensation for child deaths. Six figures and 17 tables of data are used in the discussion. (EB)

10388 **Iwanaga, M., Mori, K., Kaviti, J.N.** *Routes of cholera spreading in Kenya.* Tropical Medicine (Bethesda, Md.), 23(4), 1981, 217-222. Engl.

During outbreaks of cholera in Kenya during 1980 and 1981, 288 strains of *Vibrio cholerae* sent to the National Public Health Laboratory Services were classified by serological typing and phage-prophage typing, to determine the routes of transmission throughout the country. This article describes the methods and results of the study and includes one table and five maps illustrating type distributions. It concludes that tracing the actual movements of the victims would be necessary to correctly define the route of the disease. (EB)

10389 **Jancloes, M.F., Velden, L. van de** *Facteurs de variations saisonnières du poids chez des nourrissons à Pikine (Sénégal). (Seasonal variation weight factors in breast-fed babies in Pikine, Senegal).* Dakar Médicale (Dakar), 27(1), 1982, 168-172. Fren.

From October 1979-January 1981, 245 children (107 of them aged 8-30 months) in Pikine, Senegal, took part in a study to determine seasonal variation weight factors in breast-fed babies. Home visits were conducted every 3rd day and clinical examinations (blood tests and weight measurements) every 2nd month. Six graphs are used in the discussion of results, confirming a 1961 Dakar study that observed a sharp drop in weight during the period before the rainy season. It is felt that primary care intervention programmes should be directed at infants during the high-risk months of June to August. (EB)

10390 **Johnson, A.A., Latham, M.C., Roe, D.A.** *Prevalence and etiology of the nutritional anemias in Guyana.* American Journal of Clinical Nutrition (Bethesda, Md.), 35(2), Feb 1982, 309-318. Engl. 15 refs.

A survey of 590 Guyanese subjects from 103 households assessed the prevalence and aetiology of nutritional anaemia in both sexes, various age groups, and pregnant and lactating women. The results are discussed and presented as statistical data. Anthropometric and haematological measurements and stool investigations for intestinal parasites were carried out on each subject. High prevalences of anaemia, although of a relatively mild degree, were found among all age groups, especially among pregnant and lactating women. The major factors related to haemoglobin levels are identified. (Modified journal abstract)

10391 **Jones, G.W., McDonald, P.F., Yasin, M.** *Levels and trends in fertility and childhood mortality in Indonesia.* Jakarta, University of Indonesia, Faculty of Economics, Demographic Institute, 1975. 79p. Engl.

This monograph analyses levels and trends in fertility and infant mortality in the major regions of Indonesia, based on the results of the 1973 Fertility Mortality (FM) survey and compared with the results of the 1971 Census. An in-depth discussion of regional and urban-rural differences is presented. The methodology of the FM Survey, which involved interviews of over 54 000 households in six geographic regions, is described. Forty tables of data are used in the analysis; the appendix includes the pregnancy history form and an evaluation of the age data from the FM Survey. (EB)

10392 **Jordan, P., Unrau, G.O., Bartholomew, R.K., Cook, J.A., Grist, E.** *Value of individual household water supplies in the maintenance phase of a schistosomiasis control programme in Saint Lucia, after chemotherapy.* Bulletin of the World Health Organization (Geneva), 60(4), 1982, 583-588. Engl. 11 refs.

From 1970-1975, the incidence of new *Schistosoma mansoni* infections was reduced in five villages in Santa Lucia after each household was provided with its own individual water supply and community laundry shower units were made available. In 1975, 1976, and 1977 chemotherapy with oxamniquine was offered to persons found to be infected. Transmission was reduced further and remained at a low level for the next 4 years with no sign of an increase in spite of the reservoir of infection remaining after therapy and a poor level of sanitation in the villages. Sporadic new infections must be anticipated among children, but these will probably be of low intensity and associated with minimal morbidity. Statistical data are included. (Modified journal abstract)

10393 **Joseph, G., Sugathan, T.N., Ramankutty, P., Alkafajei, A.M., Antony, R.** *Measure of community health needs and actions in a rural area of Iraq; the Abu-al-Khasib experience.* Tropical and Geographical Medicine (Dordrecht, Netherlands), 34(3), Sep 1982, 279-286. Engl. 10 refs.

A longitudinal survey was carried out among randomly-selected households in four villages in Abu-al-Khasib district of Iraq to study health needs as perceived by the community and actions people take when the need arises. Almost three-quarters of the spells of sickness as perceived by the community were among mothers and children. Most of the morbidity was found to be within the scope of preventive services at the local health centre level, although health centres were underutilized. Only half of the spells of sickness were reported to the local health centre for medical care, partly because of the emerging reference for care by clinical specialists. Statistical data are included. (Modified journal abstract)

10394 **Joshi, D.D., Khatri, I.B.** *Human rabies in Kathmandu, Nepal.* Journal of Communicable Diseases (New Delhi), 13(3), 1981, 160-164. Engl.

In a survey to determine the incidence of rabies in humans with suspected rabid animal bites, data were collected from hospitals and veterinary clinics in and around Kathmandu, Nepal, from July 1978-June 1980. The largest number of bites were from unvaccinated stray dogs (3 898); further, 42 persons were bitten by monkeys, 24 by jackals, and 4 by cats. Comparison is made with a preliminary survey conducted in 1971-1972 in the same region; three tables are used in the discussion.

The need for an effective rabies control programme is stressed. (EB)

10395 **Kabeja, N.** *Etude des données recueillies à une consultation générale de pédiatrie à Kinshasa. (Study of data from a pediatric clinic in Kinshasa).* Afrique Médicale (Dakar), 20, Jan 1981, 21-26. Fren.

A review of pediatric cases aged 0-14 years seen in the Ngaliema clinic, Kinshasa, Zaire, during a 1-year period revealed the following: 1 806 children with 2 798 conditions were seen; about 80% were aged less than 2 years; 52.5% were boys; 58% were seen during the hot season; and 55% came from the public sector. The most frequently-cited reasons for consultation were, in descending order: diarrhea; ear, nose, and throat infections; respiratory ailments; malaria; malnutrition; anaemia; intestinal parasitism; vomiting; measles; jaundice; and other. Age distribution within these categories is briefly analyzed. (HC-L)

10396 **Kartari, D.S., Lapau, B., Sareen, J.S.** *Blood pressure values and prevalence of hypertension in certain ethnic groups on Indonesia, 1976.* Jakarta, Ministry of Health, 1979. 18p. Engl. 18 refs.

A 1976 study aimed at collecting information on blood pressure values and hypertension prevalence rates covered 5 240 individuals (2 562 males and 2 678 females) from five major ethnic groups in Indonesia. Ten tables of data from the survey are presented and discussed in terms of age, sex, ethnic group, and region. Hypertension rates were 5% or less among persons aged 15-35 years, 8%-10% among those aged 35-44 years, and 20% or more among those aged more than 45 years. Jakarta showed the highest rates: 30% of the men and 35% of the women aged 45 years and over suffered from hypertension. It was found that salt consumption contributed to hypertension among the older members of the Dayaks (East Borneo). (EB)

10397 **Kaur, Y.P., Sagar, V., Khirwar, S.S.** *Nutritional ecology and food consumption pattern of expectant mothers in selected villages and suburbs of Hissar.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(2), Feb 1982, 50-58. Engl. 8 refs.

A study of 139 expectant mothers from both rural and suburban areas of Hissar, India, examined socioeconomic background, food habits, dietary and nutrient intakes (also in relation to education and family size), and haemoglobin levels. The results are discussed and presented as statistical data. Income was found to have the most influence on food consumption patterns. (DP-E)

10398 **Kitaw, Y., Gebray, A., Bushara, B., Asfaw, B.** *Dental health conditions of students in Ethiopia: findings from the development through cooperation campaign, 1976-77.* Ethiopian Medical Journal (Addis Ababa), 20(1), 1982, 9-14. Engl. 19 refs.

In 1976, information was collected by means of a questionnaire and oral examinations of 232 students in six regions of Ethiopia to determine the dental health status and a possible association between the decayed, missing, or filled (DMF) rate and oral health practices. Four tables of data from the survey are presented and discussed. The study confirms reports that peridontal diseases are highly prevalent and dental caries may be on the increase in Ethiopia, where dental health services are almost non-existent, with only a few government and private clinics in some of the major cities. The need for a relevant prevention programme and dental training facilities is stressed. (EB)

10399 **Koshi, G., Benjamin, V., Chacko, G.** *Rheumatic fever and rheumatic heart disease in rural South Indian children.* Bulletin of the World Health Organization (Geneva), 59(4), 1981, 599-603. Engl. 13 refs.

A preliminary pilot study of streptococcal infection and sequelae was initiated in 23 villages in southern India in 1973; the latter part of the project, in 1974-1975, involved 374 rural and 664 urban schoolchildren. The findings indicate a high prevalence of rheumatic fever and rheumatic heart disease in this group; this was confirmed by a long-term surveillance carried out in the same area from 1975-1978. A high rate of compliance with prophylaxis was found. The climate and living conditions of the area are thought to be important contributory factors. The authors advocate health education and continuous surveillance. Statistical data are included. (DP-E)

10400 **Koster, F.T., Curlin, G.C., Aziz, K.M., Haque, A.** *Synergistic impact of measles and diarrhoea on nutrition and mortality in Bangladesh.* Bulletin of the World Health Organization (Geneva), 59(6), 1981, 901-908. Engl. 22 refs.

A prospective household survey of 5 775 children in 12 villages in Bangladesh, in which the occurrence of measles and diarrhea, changes in nutritional status, and the causes of all deaths during a 12-month period were monitored, revealed a measles case-fatality rate of 3.7% among all children. Prolonged diarrhea was the most common complication in fatal cases. The greatest weight loss was seen in children with measles complicated by prolonged diarrhea; children aged less than 4 years in this group failed to achieve catch-up growth. Thus measles and diarrhea appeared to interact synergistically to increase mortality and the irreversible effects of nutritional deprivation. Both a measles vaccination programme and nutrition programmes aimed specifically at children convalescing from measles are recommended. Statistical data are included. (Modified journal abstract)

10401 **Kouri, W.J., D'Alessandro, A., Hoyos, M.** *Filariasis in Colombia: presence of* Dipetalonema perstans *in the Comisaría del Guaviare.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(3), May-Jun 1982, 486-489. Engl. 15 refs.

Examination of blood samples from 75 individuals living in Guainía, Colombia, revealed that 26 were carriers of microfilaria: 18 of *Mansonella ozzardi*, three of *M. ozzardi* and *Dipetalonema perstans*, and five of *D. perstans* alone. Since *M. ozzardi* is endemic to eastern Colombia, it was not surprising that some 35% of the study population harboured it. However, that 10% carried *D. perstans* was unexpected, suggesting a wider distribution and higher prevalence of the parasite than hitherto suspected. Details of the study methodology and findings are given and further research into the epidemiology of *D. perstans* in the region is called for. (HC-L)

10402 **Kumari, S., Bharti, P., Goel, N.** *Weight pattern of breast fed infants: a cross sectional study.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 18(12), Dec 1981, 333-336. Engl. 10 refs.

A cross-sectional study of 361 infants aged 1-6 months from a lower socioeconomic group in New Delhi, India, revealed that exclusively breast-fed babies were generally smaller and lighter than those who were both breast- and bottle-fed before the age of 3 months. The inadequacy of breast milk production among these mothers is attributed to their completely deficient diet. Earlier weaning and nutrition education programmes are suggested as alternatives to increased bottle-feeding. Statistical data are included. (DP-E)

10403 **Kushwah, S.S., Gevile, A.K., Kushwah, J.** *Epidemiological study of disabilities among leprosy patients attending leprosy clinic in Gwalior.* Leprosy in India (New Delhi), 53(2), Apr 1981, 240-247. Engl. 9 refs.

This November 1977-January 1979 survey of 344 leprosy patients attending a clinic in Gwalior, India, was undertaken to identify the different types of leprosy in relation to disabilities, to identify the disabilities in relation to general variables (age, sex, occupation, education, etc.), and to suggest ways and means of preventing and halting the further progress of disabilities in these cases. The findings are discussed and presented as statistical data. It is concluded that the prevalence of disabilities in these patients is high, due mainly to late diagnosis, and exacerbated by poor living and working conditions. (DP-E)

10404 **Kusin, J.A., Parlindungan Siregar, H.S., Purba, K., Renqvist, U., Houthooper, J.M.** *Preschool child in Suka village, north Sumatra; I: feeding practices and measured food intake.* Paediatrica Indonesiana (Djakarta), 21(7/8), Jul-Aug 1981, 147-160. Engl.

A survey of the infant feeding practices of the families of 398 Indonesian village children aged 0-5 years revealed that they were breast-fed for an average of 2 years; supplementary foods consisted mainly of rice, fish, and non-leafy vegetables. Nutritional analysis over two seasons of the diets of 59 of these children showed them to be low in energy (65%-98% of the recommended daily intake), ample in protein (108%-158%), and inadequate in calcium (36%-86%), iron (44%-48%), retinal equivalents (26%-44%), and riboflavin (34%-41%). These inadequacies are attributed to the improper use of available foods, cultural habits, and maternal permissiveness. Copious statistical data are included. (Modified journal abstract)

10405 **Kusin, J.A., Parlindungan Siregar, H.S., Kheem, J., Houthooper, J.M., Renqvist, U.** *Preschool child in Suka village, north Sumatra; II: mixed longitudinal data of weight and height.* Paediatrica Indonesiana (Djakarta), 21(9/10), Sep-Oct 1981, 181-191. Engl.

In a mixed longitudinal 1-year follow-up study of 398 Indonesian village infants and children aged 0-5 years, the sharpest fall in weight and height velocity occurred at 3-6 months of age. A low breast milk output was considered a possible cause for this poor growth, as at this age the infants were exclusively breast-fed and morbidity was low. Substantial faltering in growth also occurred at 6-11 months of age, due probably to weaning foods of low energy and nutrient density and increasing morbidity. In the 2nd year of life, growth velocity remained lower than UK standards; food intakes were reasonably satisfactory but morbidity was high. By 24 months children were severely stunted but of normal weight-for-height. Statistical data are included. (Modified journal abstract)

10406 **Kutin, A.A., Semashko, I.N.** *K voprosu o sistosomozah v Narodnoj Respublike Mozambik. (Schistosomiasis in the People's Republic of Mozambique).* Medicinskaia Parazitologija i Parazitarnye Bolezni (Moscow), 50(4), 1981, 43-45. Russ. 10 refs.

In Maputo, Mozambique, in 1976 and 1977, 27 017 patients admitted to the Central Hospital with different diseases and 1 095 patients of the resuscitation section were examined for schistosomoses; 2.4% were found to be infected with *Schistosoma mansoni* and 10.1% with *S. haematobium*. The prevalence of these infections in patients examined in the wet season was higher than in the dry season. In Maputo and Inhambane in 1972-1978, 123 patients with hepatic fibrosis were examined. Eggs of schistosomes were found in 35% by stool test and in 55% by rectal tissue examinations. (Modified journal abstract)

10407 **Kvalsvig, J.D.** *Effects of schistosomiasis on spontaneous play activity in black schoolchildren in endemic areas; an ethological study.* South African Medical Journal (Cape Town), 60(2), Jul 1981, 61-64. Engl. 10 refs.

With an aim to assessing the effect of schistosome infections on the spontaneous activity of schoolchildren, ethological studies undertaken in two primary schools in Natal, South Africa, included 33 and 118 subjects, respectively, from areas with different schistosomiasis patterns. Tables of data from the study, methods used, and main findings and their implications for research and control are presented and discussed. The activity scores

dropped in subjects with egg counts of over 1 000 eggs:g dry weight of stool. Under hot, humid conditions, subjects with moderate infections (1 000-5 000 eggs) were affected to a greater degree than uninfected or mildly infected subjects. (RMB)

10408 **Lal, H.** *Comparative trial of oral chloroquine and oral co-trimoxazole in vivax malaria in children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(3), May-Jun 1982, 438-440. Engl. 11 refs.

In India, 165 children with *Plasmodium vivax* malaria were divided into five groups and administered standard doses of chloroquine and four different dosage schedules of co-trimoxazole. All regimens were effective, but, although chloroquine was faster in clearing up parasitaemia, it consistently occasioned more vomiting than did co-trimoxazole. Considering the relative lack of urgency in producing a clinical response in cases of *P. vivax* and the general intolerance of children for chloroquine, the authors suggest that co-trimoxazole in the standard dosage is the most acceptable drug for treating children with *P. vivax*. (HC-L)

10409 **Larouze, B., Slama, M., Kusielewicz, D., Rousset, J.J.** *Complications des traitements antiparasitaires. (Complications of antiparasitic treatments).* Médecine d'Afrique Noire (Dakar), 29(4), Apr 1982, 257-269. Fren. 99 refs.

The authors look at a number of patented drugs used in the treatment of protozoosis and helminthiasis. The 1st illness category includes amoebiasis, toxoplasmosis, malaria, giardia, and trichomonas, while the latter consists of nematodes, trematodes, and cestodes. Dosage, indications, complications, and side effects of the various drugs are discussed. A copious bibliography is included. (EB)

10410 **Latapie, J.L., Clerc, M., Beda, B., Delmas, M., Le Bras, P.** *Goitre endémique dans la région de Man (Côte d'Ivoire). (Endemic goitre in the Man region of the Ivory Coast).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 75(1), Jan-Feb 1982, 102-112. Fren. 29 refs.

The results of an epidemiological study of endemic goitre involving 616 subjects (327 females, 289 males) undertaken in the Man region of the Ivory Coast are discussed with the use of 6 graphs. A total of 335 subjects (54.4%) showed endemic goitre; among the females aged 25-60 years the frequency was over 80%. In a randomly chosen group of 105 goitrous subjects and 71 non-goitrous subjects, tests revealed identical thyroid function in the two populations. In both clinical and biological investigations, a high percentage of hypothyroid conditions was found. Various thyroid levels are correlated and reasons for the differences are given. (EB)

10411 **Ledward, R.S.** *Initial findings in a new obstetric unit in Saudi Arabia.* Tropical Doctor (London), 12(2), Apr 1982, 62-66. Engl. Refs.

A total of 384 obstetric cases was seen by primary care physicians at the Riyadh Military Hospital (Saudi Arabia) from December 4, 1978-July 1, 1979. Information on deliveries, perinatal mortality and morbidity, and patient's ages, nationalities, and parities is discussed and presented in five tables. Although infant mortality in this group was considered reasonable (15:1 000), further study is needed of patients not attending the hospital for delivery. (DP-E)

10412 **Lie, G.** *Family food consumption patterns in Indonesia.* Jakarta, Ministry of Health, 1976. 35p. Engl. 9 refs.
Symposium on Food and Nutrition, Bogor, Indonesia, 23-24 Aug 1976.

Based on data from a 1969-1970 nationwide socioeconomic survey, this working paper presents, with the use of 18 tables and 4 graphs, an analysis of food production and consumption patterns in Indonesia. It explores nutrient intake by geographical regions, by rural and urban areas, and by the *per capita* consumption of important food items and describes the standards used in the calculations of fat, energy, and protein consumption. In the discussion of various staple foods, it is noted that production of rice, maize, roots, and tubers must remain of high priority and may not be sacrificed in a significant degree for other foodstuffs without reducing the already marginal supply of energy and protein, especially for low-income groups. (EB)

10413 **López Uribe, A., Cárdenas Romero, C., Ruiz Galtán, M.P., Carrillo Moreno, B.M., Carrillo Muñoz, H.** *Servicio de vacunación antirrábica en los centros de salud 2 y 3 de Guadalajara, Jalisco. (Anti-rabies vaccination in two health centres in Guadalajara, Jalisco).* Salud Pública de México (Mexico City), 23(4), Jul-Aug 1981, 365-377. Span.

From 1976-1977, 3 824 individuals consulted the anti-rabies services of two health centres in Guadalajara, Mexico. This paper analyzes these cases by age and sex of victim, origin of bite, part of body affected, initiation of treatment, etc. Particularly interesting among the observations were the following: 82% of the bites were by dogs, only 20% of which had been vaccinated; only 8% of the victims sought treatment the day of the bite; and 42% of those presenting with bites were deemed in need of treatment, but the decision seemed more the product of pressure from relatives than the application of uniform criteria. Three graphs and 15 tables of data are presented and a sample of the form used by the services is included. (HC-L)

10414 **Lun, K.C., Lee, H.P.** *Standardised mortality ratios for some selected causes among the main ethnic and Chinese dialect groups in Singapore, 1970.* Singapore Medical Journal (Singapore), 22(3), 1981, 144-149. Engl. 13 refs.

This study of mortality patterns among the main ethnic and Chinese dialect groups in Singapore helps to identify high-risk groups and formulate aetiological hypotheses. Based on 1970 data, it is presented in the form of stan-

dardized mortality ratios (SMRs). The Chinese recorded significantly high SMRs for tuberculosis and cancer, the Malays for rheumatic fever/heart disease, diabetes mellitus, hypertensive disease, and perinatal mortality, and the Indians for diabetes mellitus, hypertensive disease, ischemic heart disease, and liver cirrhosis. There did not seem to be any variations among the main Chinese dialect groups in the diseases studied. A discussion of the findings, especially in the light of other morbidity information, is presented. (Modified journal abstract)

10415 **Luwang, N.C., Datta, S.N.** *Association between diarrhoeal disease and undernutrition in preschool children.* Indian Journal of Medical Sciences (Bombay, India), 36(2), Feb 1982, 29-30. Engl. 9 refs.

A March-August 1979 survey of 508 children aged less than 5 years in seven river valley villages in India revealed that 196 (38.6%) had had episodes of diarrhea in the preceding 3 months; 80.1% of these children were also classified as malnourished. Analysis of the incidence of diarrheal disease in relation to malnutrition revealed that 43.4%-65.4% of undernourished (compared to 22.4% of normal) children suffered from diarrhea, whose occurence rate increased with the severity of malnutriton. (DP-E)

10416 **Mazur, J.** *Skin diseases in Addis Ababa: a preliminary review.* Ethiopian Medical Journal (Addis Ababa), 19(4), 1981, 123-134. Engl. 14 refs.

To determine the relative frequency of skin diseases among Ethiopians attending dermatology clinics in Addis Ababa, a study of 1 000 consecutive new patients was carried out in several clinics from August-November 1980. The study results, summarized in 21 tables, are discussed and compared to those of several similar Ethiopian studies. The need for further studies and evaluations to determine the country's incidence of dermatological disorders is stressed. (EB)

10417 **Martinez-Dominguez, V., Gallego Garbajosa, P., Mg, M.G., Tamondong, C.T., Sundaresan, T.** *Epidemiological information on leprosy in the Singu area of upper Burma.* Bulletin of the World Health Organization (Geneva), 58(1), 1980, 81-89. Engl.

Also published in French and Russian.

In the course of a WHO trial designed to evaluate the possible protective action of BCG vaccine against leprosy, a longitudinal epidemiological study of the whole population was carried out in an area of very high endemicity in Burma from 1964-1976. Two mass surveys of the whole population with an interval of 4 years and annual re-examination of the 28 000 children (aged 0-14 years) in the BCG trial were carried out. The data collected yielded important information about general prevalence and yearly incidence of the disease as well as on sex, age, and classification of cases. Statistical data are included. (Modified journal abstract)

10418 **Massoud, J., Arfaa, F., Farahmandian, I., Ardalan, A., Mansoorian, A.** *Progress in the national schistosomiasis control programme of Iran.* Bulletin of the World Health Organization (Geneva), 60(4), 1982, 577-582. Engl. 10 refs.

A combination of chemotherapy and molluscicding has been used in Khuzestan, Iran, since 1966 to try to control urinary schistosomiasis. The total amount of molluscicide used each year varied from 702-3 505 kg and from 287-1 320 infected persons were detected and treated annually. The prevalence of infection has gradually declined from 8.3% in 1970 to 0.7% in 1979. During the same period, the incidence of infection among schoolchildren decreased from 3.5%-0.7%, while the proportion of *Bulinus*-infested habitats also dropped from 10%-2.4%. Statistical data are included. (Modified journal abstract)

10419 **Mata, L.** *Epidemiologic perspective of diarrheal disease in Costa Rica and current efforts in control, prevention and research.* Revista Latinoamericana de Microbiología (Mexico City), 23(2), Apr-Jun 1981, 109-119. Engl. 44 refs.

This paper traces the decline of mortality due to diarrheal disease in Costa Rica from the 1940s to the present and considers the reasons for this decline. The aetiology and treatment of the disease are also discussed. It has been established that rotavirus and bacteria are the main agents of diarrhea in this country. Oral rehydration has proven to be a safe and effective treatment for viral and bacterial diarrhea, even for very young children. Finally, the author examines current efforts to control the disease. An important programme (which appears to be very effective) is the promotion of breast-feeding. Statistical data are included. (Modified journal abstract)

10420 **Mbalawa, G.** *Cancer au Congo: étude épidémiologique. (Cancer in the Congo: an epidemiological study).* Afrique Médicale (Dakar), 20, Dec 1981, 593-596. Fren. 16 refs.

With reference to several studies on cancer in Africa, the author presents an overview of the epidemiological aspects of this disease in the Congo. Records from the General Hospital in Brazzaville show that in 1977 the most frequent cancers were liver (151 cases, 22.6%), uterine (117 cases, 17.5%), and skin (95 cases, 14.5%). Pathological and aetiological aspects and problems in conventional treatment are described and compared to findings of studies carried out in neighbouring Zaire and Cameroon. In conclusion, a number of suggestions regarding directions of future research are made. (EB)

10421 **Mbemba, M., Bolumbu, A.** *Morbidité dans la drépanocytose majeure en milieu urbain de Kinshasa, Zaire. (Morbidity of major sickle cell disease in the urban region of Kinshasa, Zaire).* Médecine d'Afrique Noire (Paris), 28(5), May 1981, 291-294. Fren. Refs.

A review of pediatric admissions to the Kinshasa University Hospital, Zaire, revealed that children with the sickle-cell trait were more susceptible than normal chil-

dren to the following: hepatitis, rheumatic heart disease, meningitis and septicaemia, osteitis and osteomyelitis, cerebrovascular accidents, bronchopneumonias, medular aplasia, and typhoid fever. The sickle-cell children were, however, less frequently affected than their counterparts by two other prevalent conditions — measles and kwashiorkor. (HC-L)

10422 **McGlashan, N.D.** *Causes of death in ten English-speaking Caribbean countries and territories.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(3), 1982, 212-223. Engl.
Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana.*

In the English-speaking West Indian islands, a lack of standardized procedures for making diagnoses and compiling information on causes of death has hampered studies comparing mortality data. Realizing this handicap, the ministries of health of 10 Caribbean countries and territories assisted in a geographic pathology survey in September-December 1980. This paper reports the results of the study, which looked at the four major causes of death: all cancers, ischemic heart disease, diabetes mellitus, and motor vehicle accidents, the data being broken down into 17 5-year age groups. The findings are discussed with the use of statistical tables. It is suggested that the applicability of the epidemiologic transition concept to this study area needs to be examined in greater depth. (EB)

10423 **Mahza, N.A., Light, G.M.** *Prescription survey for selected community pharmacies in Zimbabwe.* Central African Journal of Medicine (Harare), 27(8), Aug 1981, 154-155. Engl.

In a survey of three pharmacies in Zimbabwe, a total of 8 171 prescriptions from January 1976 and January 1979 were analyzed. The results are discussed and presented as statistical data. The major groups prescribed included antimicrobial, CNS active, cardiovascular, diuretic, anti-inflammatory, and analgesic drugs. (DP-E)

10424 **Miles, J.A., Austin, F.J., Jennings, L.C.** *Scrub typhus in the Eastern Solomon Islands and Northern Vanuatu (New Hebrides).* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(4), Jul-Aug 1981, 849-854. Engl.

Rickettsia tsutsugamushi has been isolated from *Rattus rattus* from Vanua Lava island in northern Vanuata (New Hebrides) and from *R. exulans* and *Leptotrombidium akamushi* on Ndende island in the Eastern Solomon Islands. The well known vector-mite *L. deliense* was found on Mota Lava and Vanua Lava in Vanuata, but no isolation was made from pools of this mite. Serology confirms that *R. tsutsugamushi* infects humans in the Banks group of islands in northern Vanuata and that infection is much more widespread in the Solomon Islands than the limited isolations indicate. Statistical data are included. (Modified journal abstract)

10425 **Mohammed, I., Zaruba, K.** *Control of epidemic meningococcal meningitis by mass vaccination.* Lancet (London), 11 Jul 1981, 80-83. Engl.

From 1977-1980, 2.5 million children aged 3-15 years were vaccinated against meningococcal meningitis in Bauchi, Nigeria, using a polyvalent vaccine containing groups A and C polysaccharide antigen. Two hundred and twelve, 1 509, 64, and 12 cases of the disease were reported in 1977, 1978, 1979, and 1980, respectively. This decline in the number of reported cases indicates that mass vaccination can prevent meningitis in those parts of Africa where it is endemic, although the long-term protection conferred on individuals and the community remains unknown. Concerted and sustained vaccination by all countries in the meningitis belt might lead to eradication of the disease. Some statistical data are included. (Modified journal abstract)

10426 **Molla, A.M., Sarker, S.A., Hossain, M., Molla, A., Greenough, W.B.** *Rice-powder electrolyte solution as oral therapy in diarrhoea due to* Vibrio cholerae *and* Escherichia coli. Lancet (London), 12 Jun 1982, 1317-1319. Engl. 31 refs.

In this Bangladesh study, 124 patients with acute diarrhea due to *Vibrio cholerae* or *Escherichia coli* were treated with either the standard sucrose-electrolyte solution or a cereal-based electrolyte solution containing 30 g rice powder per litre and electrolytes as recommended by WHO. The treatments were compared by measuring the rate of purging, change in body weight, serum specific gravity, urine output, and post-hydrolysis sugar content in the stool. In the rice-powder group, 80% of the cholera patients and 88% of the *E. coli* patients were successfully treated, results which were no different from those in patients receiving the sucrose-electrolyte solution, suggesting that a rice-powder solution is an efficient and safe rehydrating fluid. Statistical data are included. (Modified journal abstract)

10427 **Mondot-Bernard, J.** *Satisfaction of food requirements and agricultural development in Mali; vol. III: results of surveys on workers' activities and calculation of energy expenditure.* Paris, OECD Development Centre, Development Centre Papers, 1981. 58p. Engl. 25 refs.
See also entry 10428.

In this 3rd of a series of studies of food requirements in Mali, surveys of work duration and time use were conducted to determine the activities and energy expenditures of both men and women. Using these data the mean energy expenditure is then calculated, taking into account the cropping calendar and the energy requirements of the agricultural population. Copious statistical data are included. The need for careful interpretation of studies such as this, which appears to demonstrate that energy intake does not cover expenditure (i.e., that human beings can adjust to inadequate food), is stressed in the introduction. (DP-E)

10428 **Mcadet-Bernard, J.** *Satisfaction of food requirements and agricultural development in Mali; vol. I: results of food consumption surveys.* Paris, OECD Development Centre, Development Centre Papers, 1980. 194p. Engl. 18 refs.
See also entry 10427.
This is the 1st of three volumes that report a study of food requirements in Mali designed to help planners establish food production targets. It contains a description of the methodology and results of food consumption surveys and information on food habits and food prices. Copious statistical data are included. Although protein intake was generally satisfactory according to WHO standards, other anthropometric studies have revealed evidence of protein-calorie malnutrition in both adults and children. (DP-E)

10429 **Morbidity and Mortality Weekly Report, Washington, D.C.** *Increase in prevalence of leprosy caused by dapsone-resistant* Mycobacterium leprae. Morbidity and Mortality Weekly Report (Washington, D.C.), 30(52), 1982, 637-638. Engl.
The prevalence of secondary resistance of *Mycobacterium leprae* to dapsone among lepromatous patients treated for at least 5 years has been estimated to be 2.5:100 at-risk patients in Malaysia, 3:100 in Israel, 7:100 in Costa Rica, 10:100 in Ethiopia, 3.6:100 in Shanghai, 2:62 in the Philippines, 12:30 in Mali, and up to 7:40 in India. Because of this, combined therapy for leprosy patients is now recommended and there is an urgent need to develop new drugs and a vaccine against leprosy. (DP-E)

10430 **Munir, M., Mustadjab, I.** *Coconut water as one of the optional oral electrolyte solutions.* Paediatrica Indonesiana (Djakarta), 20(1/2), Jan-Feb 1980, 38-46. Engl. 15 refs.
With an aim to evaluating the effectiveness of salt in half-strength coconut water as an oral electrolyte solution for use in remote areas, a study involving 43 children aged less than 5 years with mild-to-moderate dehydration caused by diarrhea was undertaken at the Teling army hospital in Manado, Indonesia. The following conditions were recorded: body weight, frequency of diarrhea, vomiting, fecal form, duration of diarrhea, willingness to drink, severity of dehydration before and after rehydration, and signs of side-effects, e.g. abdominal cramps and hyperkalemia. It was concluded that the present method can be used with satisfactory results and no harmful effects. Four tables and two graphs are included. (EB)

10431 **Naghma-e-Rehan** *Effect of ante-natal care on birth weight.* Journal of the Pakistan Medical Association (Karachi), 32(4), Apr 1982, 93-99. Engl. 27 refs.
A study of 373 full-term singleton infants born to women who had attended antenatal clinics was undertaken at Nigeria's Katsina Maternity Hospital in 1977. A control group made up of 373 matched cases, i.e. infants from mothers not receiving any antenatal care, was referred to as the non-antenatal group. The parameters taken into consideration for matching were age, height, parity and socioeconomic status of the mother, sex and gestational age of the neonate, month of delivery, urban/rural place of mother's residence, and history of previous abortions. The results in terms of distribution of mothers and infant mean birth weight are presented in six tables. The author states that the study proves that antenatal care, however simple, can favourably influence intrauterine growth. A copious bibliography is included. (EB)

10432 **Nalin, D.R., Levine, M.M., Mata, L., de Cespedes, C., Vargas, W.** *Oral rehydration and maintenance of children with rotavirus and bacterial diarrhoeas.* Bulletin of the World Health Organization (Geneva), 57(3), 1979, 453-459. Engl. 24 refs.
Also published in French and Russian.
To determine whether oral glucose-electrolyte therapy could be adapted with equal success to infants with diarrhea of bacterial and viral aetiologies, oral glucose-electrolyte therapy was applied in a setting where 62 Costa Rican infants with acute diarrhea routinely received intravenous fluids. Fifty-eight of these were successfully rehydrated with oral therapy alone, without any intravenous fluids. The success rate of oral therapy was similar among diarrhea patients infected with rotavirus or bacterial pathogens. The authors conclude that oral therapy is safe and effective for the treatment of viral and bacterial diarrhea in infants with 5%-10% dehydration. Statistical data are included. (Modified journal abstract)

10433 **Nanjing Neuropsychiatric Hospital, Nanjing, China PR.** *Nanjing psychiatric survey.* Chinese Medical Journal (Beijing), 94(9), Sep 1981, 622-623. Engl.
An epidemiological survey conducted in Nanjing, the People's Republic of China, from July 1973-April 1979 revealed a psychiatric morbidity of 5.4% with the following disease distribution: schizophrenia, 34.8%; mental retardation, 22.86%; epilepsy, 21.58%; and hysteria, 15.36%. Of 10 779 cases, 4 616 were male and 5 863 female. Information is also presented on age distribution, clinical course, treatment, and mental health facilities. (DP-E)

10434 **Navab, S.W., Hosseli, P., Sadre, M.** *Health and weights of Iranian preschool children in a rural health care network.* Journal of Tropical Pediatrics (Oxford, UK), 28(4), Aug 1982, 180-186. Engl. 11 refs.
Data collected from physical examinations of 236 male and 193 female Iranian village children aged less than 6 years revealed that these children were stunted, probably due to chronic malnutrition, according to the National Center for Health Statistics (NCHS) standards recommended by WHO. Comparison with the results of a study of wealthy children from Teheran, who do reach NCHS standards, indicates that this stunting is not due

to genetic causes. Copious statistical data are included. (DP-E)

10435 **New Internationalist, Toronto, Ont.** ***Keeping the lid on the babymilk menace.*** New Internationalist (Toronto, Ont.), Apr 1982, 24-25. Engl.

Governments all over the world are trying to implement World Health Assembly recommendations on controlling the infant formula companies and encouraging breast-feeding. Some appear more concerned about their nation's children than others. In this pamphlet, the New Internationalist presents a survey of various government measures and offers an assessment of these efforts. (Modified journal abstract)

10436 **Nguemby Mbina, C., Le Bigot, P., Ouwanga, D., Koudogbo, B.** ***Parasitoses digestives à Libreville. (Intestinal parasites in Libreville).*** Médecine d'Afrique Noire (Paris), 28(3), Mar 1981, 149-152. Fren.

This report presents the results of a study of 140 patients (75 female, 65 male) with intestinal parasites at a hospital in Libreville, Gabon. A discussion of the epidemiology includes a classification table of the parasites and diseases. Trichuriasis was found in 30% of the patients, ascariasis in 25%, and hookworm disease in 10%, while strongyloidiasis accounted for only 2% of cases, a low frequency that may be due to technical problems in observing the eggs. A table lists the illnesses and corresponding types, dosage and frequency of medicine administered, and side effects observed. Action for parasitic disease control is briefly outlined. (EB)

10437 **Nwosu, A.B.** ***Community ecology of soil-transmitted helminth infections of humans in a hyperendemic area of southern Nigeria.*** Annals of Tropical Medicine and Parasitology (London), 75(2), 1981, 197-203. Engl. 15 refs.

Examination of 6 842 stool samples for 534 individuals from two villages in southern Nigeria over a 13-month period revealed a high prevalence of *Necator americanus* and *Ancylostoma duodenale* (71%), *Ascaris lumbricoides* (21%), *Trichuris trichiura* (8%), and *Strongloides stercoralis* (0.4%). Both prevalence and worm burden were markedly related to age and season and the source of infection was identified as contaminated fields around houses that lacked pit latrines and, possibly, schools. It is suggested that mass chemotherapy directed at school-age children at the onset of the dry season would drastically reduce worm prevalence rates at minimal cost. (HC-L)

10438 **Nwosu, A.B.** ***Human neonatal infections with hookworms in an endemic area of Southern Nigeria; a possible transmammary route.*** Tropical and Geographical Medicine (Amsterdam, Netherlands), 33(2), Jul 1981, 105-112. Engl. Refs.

Examination of fecal smears of 316 neonates (aged 4-5 weeks) in a human hookworm endemic area of southern Nigeria showed that 33 (10%) of them were hookworm-infected. The majority of infections were due to *Ancyclostoma duodenale*, although *Necator americanus* was the most prevalent hookworm species in the area. The incidence of neonatal infections was pronounced (64%) for mothers who were *A. duodenale*-positive 5-6 weeks postpartum. A thorough screening of 12.4 litres of colostral milk from all the 316 nursing mothers failed to show the presence of infective hookworm larvae. These results indicate a possibility of transmammary infection route for the human hookworm *A. duodenale*. Statistical data are included. (Modified journal abstract)

10439 **Odunuga, M.O.** ***Response of mothers to health education and the incidence of gastro-enteritis among their babies in Ile-Ife, Nigeria.*** Social Science and Medicine (Aberdeen, UK), 16, 1982, 1353-1360. Engl. 10 refs.

Using data collected by means of pretested questionnaires administered by interviewers, a study of 100 nursing mothers attending welfare clinics was undertaken with the purpose of evaluating their behavioural response to the educational health talks and demonstrations provided by Ile-Ife (Nigeria) health centres and to investigate the occurrence of diarrheal disease among babies. The following aspects are discussed with the use of six tables: general background of respondents; environment and home facilities; clinic attendance; hygiene observed before breast-feeding and before preparing babies' feed; hygiene observed on protection of food; bottle and utensil sterilization methods and source from which methods learnt; condition of drinking water; and incidence of diarrhea among respondents' babies. It is felt that further reduction in the incidence of gastroenteritis among babies could be achieved by reappraisal of the content of the health education talks and methods of teaching the mothers. (EB)

10440 **Oey, K.N., Lie, G.H.** ***Nutritive value of coconut, cashew and canary nuts.*** Jakarta, Ministry of Health, 1981. 16p. Engl. 11 refs.
Third Symposium of the Federation of Asian and Oceanian Biochemists, Denpasar, Indonesia, 24-27 Jun 1981.

This report describes the methods used and results obtained in an investigation to determine the chemical composition and nutritive value of three types of nuts common to Indonesia: coconut, cashew, and canary nuts. All three are very rich in oil; the latter two are used mainly in native sago recipes and are not cultivated commercially like the coconut, which is by far the most important source of cooking oil for the population. Graphs and tables are included to show growth curves of rats, composition of experimental diets, results of net protein utilization, and results of protein-efficiency ratio determinations. (EB)

10441 **Oey, K.N., Lie, G.H.** ***Coconut products as a potential source of protein for the Indonesian diet; a preliminary report.*** Jakarta, Ministry of Health, 1977. 5p. Engl. 5 refs.

Third Seminar Teknologi Pangan Bogor, Indonesia, 21-23 Jun 1977.

The aim of this report is two-fold: to present the obtained net protein utilization (NPU) values of coconut products and to interest food technologists in the human use of coconut protein through the development of safer and modern food products. Coconut skim milk, oil, and protein are considered. Coconut presscake is a by-product of the oil factory and is exported mainly as feed. Tables are used to show chemical analysis of the original material used and the NPU values that resulted from an experimental diet fed to young rats. (EB)

10442 Okoinor, F.E., Kumar, V. *Demand and need for dental care in Nigeria.* Odontostomatologie Tropicale (Dakar), 5(1), Mar 1982, 17-22. Engl. 8 refs.

Dental examinations lasting 3-5 minutes were conducted on 1 086 adult Nigerians to assess their need for fillings and periodontal, prosthetic, and orthodontic treatment. The results are discussed and presented as statistical data. Among the findings were the facts that the need for dental services was much greater than the demand, that both were greater in the urban than in the rural sector, and that most people surveyed were unaware of periodontal treatment despite the fact that they needed it. (DP-E)

10443 Omer, E.E., Ali, M.H., Taha, O.M., Ahmed, M.A., Abbaro, S.A. *Sexually transmitted diseases in Sudanese males.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 208-210. Engl.

Examination of microbiological specimens from 138 adult males examined clinically for sexually transmissible diseases at two venereal disease clinics in Khartoum province, Sudan, revealed a prevalence of 35.1% for nongonococcal urethritis, 25.9% for gonorrhea, and only 1.3% for syphilis. These and other findings are discussed and presented as statistical data. Most of the patients were aged 20-39 years; 71.4% of them were unmarried and 49.3% had acquired their infections from prostitutes. The social and cultural factors related to these results are considered. (DP-E)

10444 Omer, E.E., El Sanosi, S.M., El Gaffar, A.A. *Evaluation of the tuberculin sensitivity test in a healthy Sudanese population.* Journal of Tropical Medicine and Hygiene (London), 82(4), Apr 1979, 75-78. Engl. Refs.

Dual tuberculin testing (i.e. for specific and non-specific reactions) was carried out on 317 healthy individuals in Sudan, 251 of whom had regular contact with dairy animals and 66 of whom did not. The percentage of non-specific, doubtful, and specific reactors was similar in both groups, being approximately 27.5%, 7.6%, and 65%, respectively, but the size of the reaction (induration) varied. It is therefore recommended that induration measurements of no less than 10 mm among those in contact with dairy animals and no less than 5 mm among those with no contact with dairy animals be considered positive. Details of the study methodology and findings are provided. (HC-L)

10445 Onori, E., Grab, B. *Quantitative estimates of the evolution of a malaria epidemic in Turkey if remedial measures had not been applied.* Bulletin of the World Health Organization (Geneva), 58(2), 1980, 321-326. Engl.

In 1978, public health authorities, by means of large-scale control operations, succeeded in containing a severe malaria epidemic that had reached alarming proportions in the Cukurova and Amikova plains of southern Turkey. Using a simple mathematical model, the benefits derived from this intervention are indirectly quantified in this article by estimating the number of cases that would have occured in the area if remedial measures had not been applied. Comparison of the number of malaria cases actually detected in 1978 (70 468) with the number projected in the absence of intervention (226 252) seems to indicate that about 65% of the expected cases were prevented by the 1978 measures. Statistical data are included. (Modified journal abstract)

10446 Pan American Health Organization, Division of Disease Prevention and Control, Parasitic Diseases and Vector Control Unit, Washington, D.C. *Status of malaria eradication programs.* Epidemiological Bulletin (Washington, D.C.), 1(6), 1980, 1-5. Engl.

The 1979 status of the Malaria Eradication Programmes of Central and South American member countries of the Pan American Health Organization is assessed, with a table showing the number of reported cases of malaria (1976-1979). At the end of 1979, 37.7% of the Americas' estimated population of 600 million were living in originally malarious areas, with 50.5% of these living in areas in which the disease has been eradicated. The three main tyes of problems hampering the progress of the malaria programme are technical difficulties, economics related to development, and budgetary problems. A table summarizing principal types of problems and distribution within 18 countries is presented. (EB)

10447 Pan American Health Organization, Washington, D.C. *Poliomyelitis in Cuba, 1962-1978.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 399-400. Engl.

This brief article traces the epidemiology of poliomyelitis in Cuba since the last century and examines the 18 mass vaccination campaigns held since 1962. A series of 19 nationwide serologic studies has shown that, for all polioviruses and all years generally, the proportion of resistant individuals is rising progressively with age. (DP-E)

10448 Parsons, G.A. *Ocular survey of community school children in Madang province.* Papua New Guinea Medical Journal (Port Moresby), 25(3), Sep 1982, 151-154. Engl.

For the purposes of initiating school ocular health services, screening young children for ocular defects, assessing incidence and severity of trachoma in this group, and training medical staff in methods of ocular pathology, a survey was conducted on 6 153 children in 30 commu-

nity schools in the Madang Province of Papua New Guinea over a 2-year period. Of the 1 203 (19.6%) children diagnosed as having active trachoma, 115 (9.6%) were designated as moderate to severe cases. Colour perception deficiency was present in 98 (4.7%) boys and 8 (0.5%) girls, while a significant refractive error was noted in 87 (1.4%) subjects. The principal benefit of the survey was the training of paramedical workers, many of whom will be posted to remote areas lacking ophthalmologists. (EB)

10449 **Pearlman, R.C., Niles, L.A.** *Incidence of hearing disorders in the schoolchildren of Trinidad.* American Journal of Otology (New York), 2(4), Apr 1981, 311-314. Engl. 13 refs.

Pure-tone and immitance tests were performed on the ears of 2 047 elementary schoolchildren in the Republic of Trinidad. Approximately 20% of the ears showed type B and C tympanograms, compared with only 2% failing a 30 dB, 4 K Hz pure tone. In 13%, an ipsilateral middle ear muscle reflex could not be elicited. Results are analyzed in terms of the subjects' racial background. This study tends to support the theory of a genetic origin of otitis media. Statistical data are included. (Modified journal abstract)

10450 **Philippon, G., Moreau, J.P., Le Chapois, D., Prod'hon, J., Flye Sainte-Marie, F.** *Evaluation de protocoles de traitement collectif de l'onchocercose par la diethylcarbamazine. (Evaluation of onchocerciasis mass treatment protocols using diethylcarbamazine).* Médecine Tropicale (Marseilles, France), 41(6), Nov-Dec 1981, 613-618. Fren. 11 refs.

The results of the testing of three types of regimens for the mass treatment of onchocerciasis by diethylcarbamazine carried out in a village in southwestern Upper Volta are discussed and presented in four tables and one graph. Comparison was made to determine the most effective, best tolerated, and most practical therapeutic scheme. Most preferred was the 10-day induction treatment, which consisted of a starter dose of 25 mg on the 1st day, 50 mg on the 2nd, 100 mg on the 3rd, and 200 mg on each of the remaining 7 days, with maintenance doses of 200 mg administered bimonthly. It is felt that a follow-up study should be undertaken to determine the necessity of a 2nd course of induction therapy. (EB)

10451 **Philpott, R.H.** *Maternity services in the developing world — what the community needs; proceedings of the seventh study group of the Royal College of Obstetricians and Gynaecologists, London, 9-11 September 1979.* London, Royal College of Obstetricians and Gynaecologists, 1980. 394p. Engl.

Seventh Study Group of the Royal College of Obstetricians and Gynaecologists, London, UK, 9-11 Sep 1979.

At a 3-day conference organized by the Royal College of Obstetricians and Gynaecologists, London, UK, participants from many parts of the world met to consider the wide range of maternal child health problems and the varied solutions to these that are being applied in different countries. The conference proceedings contain the main speakers' prepared papers plus full reference lists and the main points of each session's discussion. Areas covered include maternal and perinatal epidemiology and mortality, provision of maternity services, the newborn, family planning, midwifery care, and national policies. Numerous charts, tables and graphs are included. (EB)

10452 **Prawiranegara, D.D.** *Nutrition in Indonesia.* Jakarta, Ministry of Health, n.d. 17p. Engl. 14 refs.

After giving a brief description of Indonesia's geography, population and main staple food, the author looks at the following: main nutrition problems (low caloric intake, low protein intake, vitamin A deficiency, and endemic goitre); nutrition education; nutritional research activities; development of low-cost, high quality, protein-rich foods; nutritional anaemia; and problems in the implementation of nutritional programmes for preschool children in Indonesia. He states that the fundamental problem is how to motivate people to change their food habits and improve their diet. A number of conclusions and implications related to implementation of nutritional programmes are put forward. (EB)

10453 **Rahaman, M.M., Aziz, K.M., Munshi, M.H., Patwari, Y., Rahman, M.** *Diarrhea clinic in rural Bangladesh: influence of distance, age, and sex on attendance and diarrheal mortality.* American Journal of Public Health (Washington, D.C.), 72(10), Oct 1982, 1124-1128. Engl. 10 refs.

Attendance rates at the Teknof diarrhea treatment centre (Bangladesh) were monitored during 1977-1978 among the local population and weekly home visits were also carried out to determine the incidence of diarrhea in communities within a 6-mile radius. It was found that 90% of patients with diarrhea living within one mile of the centre presented for treatment; at 2 miles, attendance fell to 70% for males and 40% for females, who for cultural reasons were not accustomed to travelling. On average, the greater the distance from the clinic, the more severe the degree of dehydration. Mortality secondary to diarrhea was significantly reduced only within a 2-mile radius of the clinic. Statistical data are included. (Modified journal abstract)

10454 **Rangkuti, S.M., Nazir, N., Sutanto, A.H., Lubis, A., Siregar, H.** *Measles morbidity and mortality in the Department of Child Health, Dr. Pirngadi General Hospital, Medan, in 1973-1977.* Paediatrica Indonesiana (Djakarta), 2(7/8), Jul-Aug 1980, 139-144. Engl.

A survey of 176 children with complicated measles hospitalized in the Department of Child Health, Dr. Pirngadi General Hospital, Medan, Indonesia, from January 1973-December 1977 revealed that 119, 58, and 52 children, respectively, suffered from bronchopneumonia, encephalitis, and diarrhea; 46 of the children died.

The highest and lowest mortality were 34.1% and 9.5%, respectively, in those aged less than 1 year and 5-12 years. Of the 130 survivors, residual sequels (e.g. brain damage) were present in 39. The results of this survey are compared with those of others in Indonesia. Statistical data are included. (Modified journal abstract)

10455 **Rao, P., Thimmayamma, B.V.** *Some experiences with the development of homelevel foods and low cost recipes in rural areas.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(3), Mar 1982, 73-79. Engl. 13 refs.

India's National Institute of Nutrition has carried out several feeding programmes using food supplements intended for infants and preschoolers in rural Hyderabad. The types of foods tested included semi-solids, solid snacks, and ready-to-mix powders. The organization of acceptability trials, promotional aspects, and operational problems are discussed. The objectives, methodologies, acceptance, effects, and problems of four of these programmes are set forth in chart form. (DP-E)

10456 **Ree, G.H.** *Knowledge and attitudes of young people regarding sexually transmitted diseases.* Papua New Guinea Medical Journal (Port Moresby), 25(1), Mar 1982, 33-36. Engl.

A questionnaire survey of 420 univeristy-level students in Papua New Guinea (of whom 70% responded) revealed that, although they were familiar with the names of sexually transmitted diseases, they were ignorant of their effects. The results are discussed and presented as statistical data. It is suggested that an intensive campaign of sex education be instituted for student teachers, since young people are the major population group at risk. (DP-E)

10457 **Rehan, N.E., Tafida, D.S.** *Low birthweight in Hausa infants.* Nigerian Journal of Pediatrics (Ibadan), 8(2), 1981, 35-39. Engl. 18 refs.

From the records of the deliveries conducted at the Maternity Hospital, Katsina, Nigeria, from January 1, 1974-December 31, 1977, the case records of all 3 890 live-born infants of Hausa parents were selected for study of birth weight. The results are discussed and presented as statistical data. The incidence of low birth weight was 21.3% (23.6% in females, 19.3% in males). The incidence appeared to be influenced by both maternal age as well as parity. Possible aetiological factors included multiple pregnancies, prematurity, and toxaemia of pregnancy. (Modified journal abstract)

10458 **Reinhardt, M.C., Lauber, E.** *Maternal diet, breast feeding and infants' growth; a field study in the Ivory Coast (West Africa).* Journal of Tropical Pediatrics (Oxford, UK), 27(5), Oct 1981, 229-236. Engl. 35 refs.

In this 18-month Ivory Coast study, four lactating women and their infants were assessed in terms of maternal diet, breast milk composition and volume, and infant growth. The results are discussed and presented as statistical data. Two of the mothers were young and undernourished and did not give supplementary food to their infants, who showed an unsatisfactory growth pattern compared to that of two infants whose well-nourished, middle-aged mothers had introduced supplements at age 6 months. Although the composition of breast milk was barely affected by maternal nutrition, quantity increased with food consumed. (Modified journal abstract)

10459 **Ripert, C., Eono, P., Eono, D., Tribouley, J., Appriou, M.** *Etude épidémiologique de la bancroftose dans la vallée du Logone (Nord Cameroun). (Epidemiological study of bancroftian filariasis in the Logone Valley (north Cameroon).* Médecine Tropicale (Marseilles, France), 42(1), Jan-Feb 1982, 59-66. Fren. 16 refs.

A total of 626 inhabitants (363 males, 264 females) of the Logone Valley, Yagoua, north Cameroon, took part in an epidemiological study of bancroftian filariasis in which blood films were collected at night and examined for reaction by immunofluorescence tests with *Dipetalonema viteae* antigen. The microfilarial rate (*Wuchereria bancrofti*) was 22.1% for males and 9.8% for females; antibodies were present in 61.5% of the males and 68.2% of the females. Elephantiasis of the scrotum was observed in 2.8% of the men, all aged over 40 years, and elephantiasis of the leg in 1.2%. Females of the *Anopheles gambiae* were the most frequently found mosquito in the houses of the subjects, especially at the beginning of the rainy season. The paper includes 9 graphs and 2 tables from the study. (EB)

10460 **Riverón Corteguera, R., Córdova Vargas, L., Valdés Lazo, F.** *Enfermedades diarréicas agudas en Cuba. (Acute diarrheal diseases in Cuba).* Archivos Dominicanos de Pediatría (Santo Domingo), 17(1), Jan-Apr 1981, 55-68. Span. 24 refs.

From 1962-1977 in Cuba, mortality from diarrhea in children aged less than 1 year declined from 12.9-2.6: 1 000 live births. This paper outlines the measures that were deemed responsible for this reduction and presents statistical data on mortality from gastroenteritis by year and age group for the period under question. Data on hospitalization due to diarrhea and the various disease agents that have been identified are included. (HC-L)

10461 **Rodríguez Cruz, R.** *Quince años del control de la tuberculosis en Cuba. (Fifteen years of tuberculosis control in Cuba).* Revista Cubana de Higiene y Epidemiología (Havana), 18(3), Jul-Sep 1980, 206-214. Span.

With the aid of 13 tables of data, this paper examines the evolution of tuberculosis control in Cuba from 1964-1979. During this period, mortality due to tuberculosis fell from 15.43-1.8:100 000 population and the number of new cases notified per year declined from 52.6-11.6:100 000 population. Thanks to BCG vaccination of newborns and 5th-grade schoolchildren, most new cases have been concentrated in the over-45 age group. Some

modifications to the tuberculosis control programme, to be implemented during 1980-1985, are outlined. (HC-L)

10462 **Salih, M.A., Suliman, G.I., Hassan, H.S.** *Complications of diphtheria seen during the 1978 outbreak in Khartoum.* Annals of Tropical Paediatrics (Liverpool, UK), 1(2), 1981, 97-101. Engl. 31 refs.

During an outbreak of diphtheria involving 107 children in Khartoum, Sudan, 29 patients were admitted to hospital with complications of the disease. Palatal palsy occurred in 72.4% of the patients, bronchopneumonia in 44%, and cardiovascular complications in 20.7%. Six patients died, five due to cardiovascular complications and one following a tracheostomy. Further details of the clinical presentation and outcome of the 29 cases are provided and the importance of immunization in a country where diphtheria remains an important cause of childhood morbidity and mortality is pointed out. (HC-L)

10463 **Santosham, M., Daum, R.S., Dillman, L., Rodríguez, J.L., Lugo, S.** *Oral rehydration therapy of infantile diarrhea; a controlled study of well-nourished children hospitalized in the United States and Panama.* New England Journal of Medicine (Boston, Mass.), 306(18), May 1982, 1070-1076. Engl. 29 refs.

A controlled, randomized study of 52 US and 94 Panamanian children aged 3 months-2 years who were hospitalized with acute diarrhea revealed that oral rehydration with solutions containing either 50 or 90 mmol of sodium per litre was successful in 97 of 98 cases; in 87 (89%), no intravenous therapy was required. Both solutions are therefore judged to be effective and safe in the treatment of well-nourished children and may completely replace intravenous fluids. Statistical data are included. (Modified journal abstract)

10464 **Sarnoff, R.** *Growth surveillance as an instrument for better programming.* Nairobi, Catholic Relief Services Sub-Sahara Regional Office, 1980. 21p. Engl. 4 refs.

The Catholic Relief Services (CRS) have developed a system of growth surveillance for use in monitoring supplementary feeding programmes for preschool children sponsored by its Sub-Sahara Regional Office in Nairobi, Kenya. This paper shows how the two-component system, consisting of a growth surveillance chart and a master chart, can facilitate programming at the clinic and national levels. With nutritional status data readily available, programme size, food allocation, and the nutritional needs of the population can be assessed more easily by this method. Three charts and four tables of data from the CRS Lesotho Office are presented to show the types of data analysis being conducted in order to achieve a greater nutritional impact through close surveillance. (EB)

10465 **Sauter, J.J.** *Why measles make so many children blind.* Tropical Doctor (London), 12(4), Oct 1982, Part 2, 219-222. Engl. 10 refs.

Corneal lesions, which often go unnoticed in measles patients (who tend to keep their eyes closed because of photophobia), are a common complication of the disease in malnourished children and, when untreated, can result in blindness. This article discusses the clinical picture in severe measles and recommends massive oral doses of vitamin A to both prevent and treat corneal involvement. Investigations in Kenya and Tanzania revealed that xerophthalmia following measles was the cause of disability in 47%-68% of blind children surveyed, while treatment with vitamin A of 420 malnourished children aged 4-60 months admitted to a Dar es Salaam hospital for measles complications (14% already with severe xerophthalmia) was 100% effective in preventing blindness. (DP-E)

10466 **Schenone, H., Rojas, A., Galdames, M., Villarroel, F., González Hernández, E.** *Panorama de las helmintiasis intestinales humanas transmitidas a través del suelo en Chile (1970-1980). (Scope of soil-transmitted human intestinal helminthiasis in Chile (1970-1980)).* Boletín Chileno de Parasitología (Santiago), 36(1/2), Jan-Jun 1981, 9-13. Span. Refs.

Examination of stool samples from 9 489 persons from five different climatic zones of Chile from 1970-1980 revealed that the most common helminthic infections were *Ascaris lumbricoides* and *Trichuris trichiura*, which occurred in 20.7% and 28.5% of the survey population of the forest zone, respectively. In the other zones, infections were much less prevalent (mostly under 3.4%). Most occurred in persons aged less than 20 years. The results are discussed and presented as statistical data. (Modified journal abstract)

10467 **Scott, D., Senker, K., England, E.C.** *Epidemiology of human* Schistosoma haematobium *infection around Volta Lake, Ghana, 1973-75.* Bulletin of the World Health Organization (Geneva), 60(1), 1982, 89-100. Engl. 11 refs.

Epidemiological investigation of urinary schistosomiasis in the Volta Lake (Ghana) area revealed that age, sex, and ethnic affiliation were the main factors influencing demographic patterns of the prevalence and intensity of infection. These findings are discussed and presented as statistical data. In general, it was found that both prevalence and intensity increased in children to the age of 10-14 years and were greater in males; differences between the two main ethnic groups were due to different lake-related activities. Research on the snail host and the lakeside ecology was also carried out. (Modified journal abstract)

10468 **Seth, V., Kukreja, N., Sundaram, K.R., Malaviya, A.N.** *Delayed hypersensitivity after BCG in preschool children in relation to their nutritional status.* Indian Journal of Medical Re-

search (New Delhi), (77), 1981, 392-398. Engl. 17 refs.

Cell-mediated immune response was studied by Mantoux test in 154 Indian preschool children after BCG in relation to their nutritional status. A significantly higher percentage of children showed Mantoux test positivity with 5 tuberculin units (TU) than with 1 TU. Overall skin positivity with 5 TU was elicited in 68.8% of children with normal nutrition and in 37.5% of children with severe protein-energy malnutrition. Mantoux conversion rates after BCG in children with mild-to-moderate malnutrition were comparable to those in the normally-nourished group while, in the malnourished group, children aged 3-6 years had lower rates of conversion than those aged 1-5 years. Statistical data are included. (Modified journal abstract)

10469 Shann, F.A., Germer, S., Lansdown, S., Bugg, H.C., Bishop, R.F. *Rotavirus infection in young children in the highlands of Papua New Guinea.* Medical Journal of Australia (Sydney), 2(3), Aug 1980, 153-154. Engl.

Rotavirus was detected by electron microscopy in the stools of 54 of 66 children (82%) with acute diarrhea admitted to a hospital in the highlands of Papua New Guinea from April-July 1979. This rate of rotavirus identification is comparable with that during cold months in temperate climates. It is higher than has been detected in other tropical climates or in an earlier study from the same highlands when no rotavirus was detected. (Modified journal abstract)

10470 Sigulem, D.M., Tudisco, E.S. *Aleitamento natural em diferentes classes de renda no município de São Paulo. (Breast-feeding in different economic backgrounds in São Paulo).* Archivos Latinoamericanos de Nutrición (Caracas), 30(3), Sep 1980, 400-431. Portuguese.

Some of the findings of a study of 500 mother/child pairs from various socioeconomic backgrounds in São Paulo, Brazil, were as follows: failure to breast-feed was significantly associated with malnutrition in children aged less than 2 years; initiation and duration of breast-feeding correlated negatively with prenatal care and hospital delivery; insufficient milk (50%), weak milk (14%), and doctor's advice (11%) were most often given as reasons for early weaning; and, contrary to expectation, work outside the home was given as a reason for early weaning in only 1.4% of all cases. Greater effort on the part of the health personnel in promoting breast-feeding is obviously indicated. (HC-L)

10471 Simmons, W.K., Gurney, J.M. *Nutritional anemia in the English-speaking Caribbean and Suriname.* American Journal of Clinical Nutrition (Bethesda, Md.), 35(2), Feb 1982, 327-337. Engl. 53 refs.

Anaemia is a problem in all countries of the English-speaking Caribbean where data are available. It affects mostly preschool children and pregnant and lactating women. The most common cause is a deficiency of iron, probably due to an inadequate intake combined with a low absorption. A deficiency of folate is also a probable factor in the pathogenesis of some of the anaemias. Anaemias associated with parasitic infestations such as hookworm and whipworm and haemoglobinopathies such as sickle cell anaemia are also noted. Statistical data are included. (Modified journal abstract)

10472 Singer, R., Kimura, K. *Body height, weight, and skeletal maturation in Hottentot (Khoikhoi) children.* American Journal of Physical Anthropology (Philadelpha, Pa.), 54(3), 1981, 401-413. Engl. 38 refs.

As part of a survey of the biology of the Hottentots of Namibia (South Africa), this study of body height and weight and skeletal maturation involved 110 Hottentot children aged 3-17 years (49 males, 61 females) and 237 Rehoboth Basters and Cape Coloureds aged 1-21 years (124 males, 113 females). The data were mainly collected in 1961; the TW2 method with the 20-bone scores was used in assessing skeletal maturity. Six graphs and 6 tables of data from the study are presented and discussed. The paper conludes with a brief look at how socioeconomic factors may affect some of the differences between the three groups. (EB)

10473 Smith, V.E., Kolasa, K., Strauss, J., Whelan, W., Bingen, L. *Development and food consumption patterns in rural Sierra Leone.* Food and Nutrition (Rome), 7(2), 1981, 24-32. Engl.

This paper summarizes the results of a series of studies in Sierra Leone, where the food consumption of farming households was measured and cross-tabulated against various indices of commercialization and socioeconomic status. These included amount of farm produce sold, market orientation, income, and dependency ratios. The results do not show any clear trend. In cassava-production farms, households that produced most of their own food had higher intakes than those that purchased more, although the opposite was found for rice farms. Statistical data are included. (Modified journal abstract)

10474 Smrkovski, L.L., Escamilla, J., Wooster, M.T., Rivera, D.G. *Preliminary survey of malaria in Occidental, Mindoro, Philippines.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 13(2), Jun 1982, 181-185. Engl.

The examination of 600 blood film samples in a malaria survey in northwest Mindoro, the Philippines, revealed an overall prevalence of 7% (4.3% *Plasmodium vivax*, 2.8% *P. falciparum*, and 0.7% *P. malariae*). The results, which are discussed and presented as statistical data, will be used to select appropriate sites for future studies on drug-resistant *P. falciparum* malaria. (DP-E)

10475 Snyder, J.D., Merson, M.H. *Magnitude of the global problem of acute diarrhoeal disease: a review of active surveillance data.* Bulletin of the

World Health Organization (Geneva), 60(4), 1982, 605-613. Engl. 32 refs.

Analysis of data from 24 studies of morbidity and mortality from acute diarrheal disease in the developing world reveals that morbidity was highest among infants aged 6-11 months while mortality was greatest among children aged 1 year or less. For children aged less than 5 years, the median incidence of diarrhea was 2.2-3.0 episodes per child year. Using 1980 population estimates, the approximate total yearly morbidity and mortality for diarrheal disease for children aged less than 5 years in Africa, Asia (excluding China), and Latin America were 744-1 000 million episodes and 4.6 million deaths. Statistical data are included. (Modified journal abstract)

10476 **Soetomenggolo, T.S., Purboyo, R.H., Hendrato, S.K., Ismael, S.A.** *Neonatal tetanus treated with diazepam as single antispasmodic agent.* Paediatrica Indonesiana (Djakarta), 21(5/6), Jun 1981, 101-106. Engl. 9 refs.

This study of 43 infants admitted to the Department of Child Health, Dr. Cipto Mangunkusumo General Hospital, Jakarta, Indonesia, reveals that the use of diazepam as a single antispasm agent in treating neonatal tetanus is better than the conventional therapy of combining phenobarbital, chlorpromazine, and diazepam. The normal dose (10 mg:kg of body weight:day) can be increased for very severe cases. Overall mortality was 50%, with an incubation period of less than seven days and temperature on admission of more than 39° C as important contributing factors. The critical period of neonatal tetanus was found to be 15 days. Statistical data are included. (Modified journal abstract)

10477 **Sangoonga, O.O.** *Sanitary quality and health implications of well waters in Ile-Ife, Nigeria.* Nigerian Medical Journal (Ibadan), 9(4), 1979, 493-497. Engl.

As a result of the chronic shortage of piped water of Ile-Ife, Nigeria, households have dug shallow gravity wells to provide themselves with some form of water supply. Water samples from 18 representative wells are analyzed in terms of: temperature; hydrogen iron concentration (pH); total, suspended, and dissolved solids concentration; biochemical and chemical oxygen demand; dissolved oxygen; hardness; flouride ion concentration; and total and fecal coliform counts. The results, which are discussed and presented as statistical data, revealed that all the wells required additional treatment, such as *in situ* chlorination, to make the water safe for human consumption. (DP-E)

10478 **Srivastava, J.N., Saksena, D.N.** *Infant mortality differentials in an Indian setting: follow-up of hospital deliveries.* Journal of Biosocial Science (London), 13(4), Oct 1981, 467-478. Engl. Refs.

Using data collected through follow-up home visits to 916 mothers whose singleton babies were born at Dufferin Hospital, Lucknow, India, from September 1976-August 1977, infant mortality for that period was estimated at 7.45:1 000 births, with evidence of a recent decline, and related to selected socioeconomic, demographic, and health care characteristics. Among the former, infant mortality was found to be inversely related to caste status among Hindus, mother's education, and father's monthly income and occupation; it was also negatively affected by antenatal care and a higher birth weight. Statistical data are included. (DP-E)

10479 **Sulzer, A.J., Adams, L.J., Castella, R.A., Colichón, A., Soto, J.** *Malaria antibody and parasitaemia patterns in one immune and one non-immune population in a malarious area of northern Peru.* Annals of Tropical Medicine and Parasitology (London), 75(4), 1981, 375-381. Engl.

A malaria study was carried out in an oil exploration concession in northwestern Peru on the Pastaza river. Stained blood slides were examined and a serological test carried out on both oil field workers and native Jivaro Indians. Two matched age groups had comparable percentages of malaria as determined with stained blood slides. However, serological tests indicated that the native Indians had had far more experience with malaria. They also reflect some success in protecting the workers from malaria. The focus appears to be caused entirely by *Plasmodium vivax*, with *P. falciparum* and *P. malariae* absent. Malaria control measures should be instituted among the native population for their own benefit as well as to further protect the workers. Statistical data are included. (Modified journal abstract)

10480 **Suseto, Suharyono, Wibowo, S., Samarso** *Oral rehydration solution; an appropriate formula for acute infantile diarrhoea.* Paediatrica Indonesiana (Djakarta), 20(9/10), Sep-Oct 1980, 205-215. Engl. 19 refs.

Using two groups of children aged 2-36 months with acute infantile gastroenteritis and mild-to-moderate dehydration, this study involved oral rehydration treatment with two different types of solutions: the standard WHO/UNICEF oral electrolyte solution and a new 'kristalyte' solution with the following composition: Na 51.2, K 25.0, Cl 37.5, Citrate 57.5 mg:l, dextrose 100, and sucrose 52.0 mMol:l. Stool cultures and sensitivity tests were done on admission only; clinical and chemical observations were made before and after rehydration, which generally occurred after 24 hours of therapy. In the following areas treatment with the 'kristalyte' solution had better results than the standard solution: gaining body weight, reducing frequency of diarrhea or fluid loss, acceptance of solution, and reducing risks of periorbital edema. The results are discussed and summarized in six tables. (EB)

10481 **Tan, D.S., Lee, W.S.** *Enterovirus type 70 epidemic of acute conjunctivitis in peninsular Malaysia, 1980.* Medical Journal of Malaysia (Kuala Lumpur), 36(2), Jun 1981, 76-78. Engl.

Sixty-nine cases of acute conjunctivitis forming part of a large Malaysian epidemic are described. The diagnosis

was based on serology. In spite of repeated attempts, the authors failed to isolate the virus in HeLa cells. The symptoms of subconjunctival haemorrhage, corneal involvement, purulent discharge, and pre-auricular lymphadenopathy were found more frequently, compared to a previous epidemic of the same disease in 1978 caused by Coxsackie 24 virus. Statistical data are included. (Modified journal abstract)

10482 Tarwotjo, I., Soemar, A., Soegiharto, T., Sosanto, D., Muhilal *Dietary practices and xerophthalmia among Indonesian children.* American Journal of Clinical Nutrition (Bethesda, Md.), 35(3), Mar 1982, 574-581. Engl. 30 refs.

Data are presented from surveys covering the whole of Indonesia in 1977 and 1978 to show that young people with xerophthalmia eat the following foods less frequently than control subjects: eggs, fish, dark green leafy vegetables, carrots, and carotene-containing fruits. The importance of diet in preventing this potentially blinding disease is stressed. Statistical data are included. (Modified journal abstract)

10483 Tawai, J. *Prevalence of concomitant sexually transmitted infections in Goroka.* Papua New Guinea Medical Journal (Port Moresby), 23(3), Sep 1982, 159-163. Engl.

Four tables of data are presented from a survey conducted from March 1980-April 1981 at the Sexually Transmitted Disease (STD) Clinic in Goroka, Papua New Guinea, involving 339 patients who were diagnosed, treated, and recorded according to standard patterns. The clinical diagnosis of syphilis was serologically confirmed by both VDRL and TPHA tests in 31 (52%) of the 60 cases treated as syphilis, being above the country's overall average of 21% calculated in 1980. The frequency of concomitant syphilitic infection was 15% among patients with granuloma inguinale, 19% of non-specific ulcers, 4% of gonorrhea, and 3% of non-specific urethritis cases. A large majority of the patients whose symptoms had subsided did not return to the clinic despite request, while 7% of patients with positive serology received no treatment, having left the clinic before the results were available. (EB)

10484 Tewari, A., Chawla, H.S., Subba Reddy, V.V. *Caries preventive effect of topical applications of sodium fluoride — 1 and 1/2 years clinical trial.* Bulletin of the Postgraduate Institute of Medical Education and Research (Chandigarh, India), 14(2), 1980, 99-106. Engl. 29 refs.

A clinical trial involving 451 schoolchildren was carried out in India in order to determine the effectiveness of sodium fluoride (NaF) topical application in preventing dental caries. After 18 months, analysis of net mean increments of decay-missing-filled teeth (DMFT) and decayed-missing-filled-surfaces (DMFS) for the teeth present at the baseline survey showed that with NaF there was a 56.61% DMFT reduction and a 54.82% DMFS reduction. The reductions were 38.20% DMFT annd 39.35% DMFS for new teeth. Both are statistically very highly significant and it is concluded that NaF topical application has good potential as a preventive public health measure. This paper details and discusses the study methodology and findings. (HC-L)

10485 Thimmayamma, B.V., Rao, P., Rao, K.V. *Socio-economic status, diet and nutrient adequacies of different population groups in urban and rural Hyderabad.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 19(5), May 1982, 173-183. Engl. 16 refs.

The purpose of a 1972-1974 study involving 574 subjects from 176 urban area families and 783 subjects from 171 rural area families around Hyderabad, India, was to assess whether there is any variation in the pattern of food consumption and nutritional adequacies of different population groups as judged by age, sex and socioeconomic status. Food and nutrient intakes were measured and compared with the suggested requirements of the Indian Council of Medical Research. Energy and protein adequacies and socioeconomic differences in vitamin and mineral intakes were calculated. Eight tables of data from the study are used in the discussion of results. (EB)

10486 Thimmayamma, B.V., Rao, P., Rao, K.V. *Fertility pattern of mothers in a changing rural environment.* Indian Journal of Nutrition and Dietetics (Coimbatore), 18(12), Dec 1981, 328-332. Engl. 8 refs.

The fertility pattern of a socioeconomically-changing rural area of India was studied from 1961-1974. The results are discussed and presented as statistical data. Age of marriage showed an increase as did the literacy rate among women; live births per mother decreased. Nutritional status was not significantly different. The various factors affecting these results are considered. (Modified journal abstract)

10487 Thomas, V., Sng, K.H., Yap, P.L. *Serioepidemiology of malaria.* Tropical Doctor (London), 11(4), Oct 1981, 149-154. Engl. 14 refs.

With an aim to determining the age-specific pattern of *Plasmodium falciparum* antibody prevalence, splenomegaly, and parasitic rates in infants and children in a highly malarious community, a 2-week study of 143 out of the 190 children aged less than 14 years living in 10 small villages in the mountainous interior jungles of Ulu Kelantan in peninsular Malaysia was undertaken in April 1977. Blood tests by standard strip-type filter paper and spleen measurements were carried out and personal data recorded. The age-specific patterns are tabulated and the clinical findings discussed with reference to similar studies previously undertaken in Africa and Asia. The *P. falciparum* antibody prevalence rate was 84.6% compared with 81.8% spleen and 43.3% parasite rates. (EB)

10488 Tikrooti, R.A., Ramankutty, P., Antony, R., George, A., Habib, O.S. *Diagnostic study of pregnancy experiences of married women in Iraq.* In-

ternational Journal of Health Education (Geneva), 24(4), 1981, 280-285. Engl.

A total of 301 randomly-selected married women aged less than 50 years from six rural Iraqi villages were interviewed to collect data on: 1) the total number of pregnancies and live births, pregnancy wastage, and infant mortality; 2) complaints and complications perceived by them during antenatal, natal, and postnatal phases of the previous pregnancy; and 3) the extent to which they utilized locally-available maternal child health services. The results are discussed and presented as statistical data. The study revealed that, on the whole, routine and antenatal services are not popular, although up to 90% of the women in several villages had gone to hospital for their previous deliveries, and that rapid social change can apparently increase the incidence of miscarriage. Health planners are also advised not to overlook traditional practitioners and birth attendants. (DP-E)

10489 **Toure, I., Sokal, D.C.** *Enquête tuberculinique dans la province de l'Ouémé au Bénin. (Tuberculosis survey in Ouémé province, Benin).* Médecine d'Afrique Noire (Dakar), 30(4), Apr 1983, 177-185. Fren. 11 refs.

A total of 3 943 people (2 839 aged less than 14 years) in the Ouémé Province of the People's Republic of Benin were examined for BCG scars from January-February 1981. In addition, 530 tuberculin tests were carried out. Only 22.9% of the children aged 1-4 years were found to have BCG scars. No significant difference regarding BCG coverage was found between males and females in the survey. Vaccine coverage in general was 18.6% among subjects aged less than 14 years and 47.5% among those aged more than 14 years. The annual risk of infection was estimated at 2.4% by Lafaye's catalytic method. It is suggested that the BCG vaccination programme be intensified at the rural maternity centre level and made an integral part of a child's 1st 5 years of life. (Modified journal abstract)

10490 **Triverdi, C.R.** *Profile of dog bites, rabies and default in antirabic immunisation at V.S.G. Hospital, Ahmedabad.* Journal of the Indian Medical Association (Calcutta, India), 76(7/8), Apr 1981, 134-136. Engl. 8 refs.

Vast numbers of people are bitten by dogs in India and some 15 000 die of rabies every year. About 3 000 000 people are vaccinated with Semple-type vaccine annually. Analysis of a sample of 5 000-6 000 dog bites treated at one clinic in 1979 showed that most bites occur in winter; males aged 5-15 years are the most frequent victims and are usually bitten on the legs. In most cases, treatment was promptly sought and received. However, many failed to complete the recommended course of 7-14 doses. The cumbersome and unacceptable nature of this method of anti-rabies treatment is emphasized by the author and a plea is made for better vaccines. Statistical data are included. (Modified journal abstract)

10491 **Vaughan, J.P.** *Blood pressure and heart murmurs in a rural population in the United Republic of Tanzania.* Bulletin of the World Health Organization (Geneva), 57(1), 1979, 89-97. Engl. 38 refs.

Also published in French and Russian.

Hypertension, congestive heart failure, and valvular heart disease are frequently seen among hospital patients in the United Republic of Tanzania. A population survey was therefore carried out to determine the prevalence of hypertension and cardiac murmurs in a random sample of 333 men and 275 women aged 25-64 years living in an undeveloped rural area. Standard cardiovascular survey methods as recommended by WHO were used. The results are discussed and presented as statistical data. Mean systolic blood pressure in women only increased with age. Hypertension was uncommon. Murmurs of grade 2 or more were found in 17% of the men and 22% of the women. Mitral valve diastolic murmurs were heard in 4 of the women. The cause of the high prevalence of systolic murmurs is unknown. (Modified journal abstract)

10492 **Vertongen, F., Carael, M.** *Refugee camps in Somalia: a micro survey (March 1980).* Disasters (London), 5(1), 1981, 18-23. Engl. 10 refs.

As a result of drought and war, by 1980 there were 850 000 Somalians (25% of the country's population) living in four refugee camps. After reviewing the growth of the camps and noting the relative lack of outside aid, the authors present a demographic, clinical, and nutritional study of one of the camps. The results are discussed and presented as statistical data. Conditions in this camp were not especially severe, probably because of its proximity to the provincial capital. Nevertheless, 27% of the children aged 1-6 years were malnourished and 14% of the mothers had anaemia. Poor sanitary conditions and a fluctuating food supply were the main factors in the pattern and prevalence of infection and malnutrition. (DP-E)

10493 **Victoria, C.G.** *Statistical malpractice in drug promotion: a case-study from Brazil.* Social Science and Medicine (Aberdeen, UK), 16(6), 1982, 707-709. Engl. 12 refs.

During a 6-month period in 1979, all drug advertisements delivered to four specialists in internal medicine in the city of Pelotas, Brazil, were analyzed for misleading information. Biased sampling, lack of control groups, small experimental groups, non-significant differences, fallacious comparisons, and misleading graphs occurred three or more times in the surveyed materials. One or more examples of each are provided. In the short term, the situation could be improved by educating physicians in medical school and through continuing education to be more critical of pharmaceutical claims and by establishing a code of ethics governing the industry in their advertisements to the medical profession. (HC-L)

10494 **Vijayadurgamba, E., Geervani, P.** *Diet and nutritional status of pre-school children and nutritional awareness of the mothers of urban slums of Hyderabad.* Indian Journal of Pediatrics (Calcutta, India), 46(372), Jan 1979, 8-12. Engl.

Data from a survey of 250 Hyderabad (India) slum children aged 2-5 years who participated in a 1971-1972 nutrition programme revealed that 94% were breast-fed until the age of 24 months, there was no particular age of weaning and no special food, and food and nutrient intakes were well below recommended values. Statistical data are presented on the children's diets and anthropometric measurements. The results of a questionnaire administered to their mothers revealed that 88% had poor knowledge of their children's nutritional requirements. (DP-E)

10495 **Watkinson, M., Lloyd-Evans, N., Watkinson, A.M.** *Use of oral glucose electrolyte solution prepared with untreated well water in acute non-specific childhood diarrhoea.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 74(5), 1980, 657-662. Engl. 31 refs.

In a study carried out from July-October 1979 in the rural Gambian village of Kantonkunda and involving 48 children aged 3 months-4 years with acute diarrhea, the effects of two oral glucose-electrolyte solutions were compared: one prepared with untreated, bacteriologically-contaminated well water and the other prepared with clean drinking water. The bacteriological methods and study results are described using two tables and one graph. It was found that, since potentially pathogenic organisms occurred in much greater quantities in local infant weaning foods (the major cause of diarrhea) than in the well water solution, the latter was still an effective diarrhea treatment. The need for further and longer trials of this nature is stressed. (EB)

10496 **WHO, Geneva.** *Mortality in Asia.* WHO Chronicle (Geneva), 35(5), 1981, 163-167. Engl.

Morbidity and mortality data in South and East Asia during the period 1950-1975 are examined and a number of conclusions are discussed. While malnutrition and diarrheal and communicable diseases remained constant in the region, some countries such as Japan, Hong Kong, China, and Sri Lanka have experienced distinct shifts in the cause-of-death structure, resulting from the emergence of cancer, cardiovascular diseases, and accidents. Factors affecting some countries' premature retardation of mortality decline at relatively high levels include economic growth and development, nutrition and food supply, adequacy and accessibility of health care, and demographic trends. A number of important considerations to be taken into account by Asia's health planners and policy-makers are put forth. (EB)

10497 **Wood, H.A.** *Mortality in three departments in Colombia: a preliminary assessment.* Social Science and Medicine (Aberdeen, UK), 15D(4), Nov 1981, 439-447. Engl.

An analysis of published data on causes of mortality for six age groups in the departments of Caldas, Quindio, and Risaralda, Colombia, shows that overall death rates are quite low except for infants and the elderly. Major causes of death were much the same for all departments: chronic ailments, transmitted infections, a lack of sanitation, and, for young adults, accidents and violence. Over 50% of all deaths in each age category occurred without medical attention. Socioeconomic differences among the departments that may be related to causes of death are considered. Certain factors that cannot be tested make hard conclusions difficult. The author does urge, however, that more care be given to gathering information. Statistical data are included. (DP-E)

10498 **Woolcock, A.J., Green, W., Alpers, M.P.** *Asthma in a rural highland area of Papua New Guinea.* American Review of Respiratory Disease (Baltimore, Md.), 123(5), 1981, 565-567. Engl. 11 refs.

In April 1978, 46 patients who had been given bronchodilator therapy during the previous 2 years in the eastern highlands of Papua New Guinea were examined by history, physical examination, lung function, methacholine provocation, skin prick tests, and IgE measurement to determine whether or not they had asthma, which is normally rare in this population. The results revealed that 19 had irreversible chronic airflow obstruction and in 9 patients it was not possible to distinguish between asthma and irreversible airflow obstruction. No obvious change in the environment or lifestyle was found to explain the recent onset of severe asthma. Statistical data are included. (DP-E)

10499 **Yang, S.O., Pendleton, B.F.** *Socioeconomic development and mortality levels in less developed countries.* Social Biology (Chicago, Ill.), 27(3), 1980, 220-229. Engl. 35 refs.

The aim of this paper is to investigate the effect of socioeconomic development and health services on recent mortality levels in less-developed countries (LDCs). Using UN statistical data on 94 LDCs from the mid-1970s, path analysis was performed to test the direct and indirect relationship among the following variables: economic development, education level, living standards, health services, and diet. For comparison purposes, the same model was also tested for 30 more-developed countries (MDCs). The paper concludes that the concept of mortality for LDCs and MDCs is orthogonal and requires different empirical indicators. (EB)

10500 **Younes, S.A., El-Angbawi, M.F.** *Dental caries prevalence in intermediate Saudi schoolchildren in Riyad.* Community Dentistry and Oral Epidemiology (Copenhagen), 10(2), Apr 1982, 74-76. Engl. 12 refs.

With an aim to collecting data required for the planning and development of nation-wide dental services, a study of 1 378 schoolchildren aged 13-15 years (685 males, 693 females) was undertaken in Riyad, Saudi Arabia. The results indicated a uniformly lower prevalence of

caries in Saudi children than in industrialized Western populations. Some reasons for the difference, e.g. diet, traditional oral hygiene practices, are mentioned. The high percent (77.6%) of treatment needs among the children and the low level of efficacy of operative dentistry point to the need for further planning. (EB)

Family Planning Manpower, *See also: Family Planning; Health Manpower;* 10210
Family Planning Programme, *See also: Family Planning;* 09975, 10209, 10241, 10307
FAO, 09887
Federation of Cuban Women, *See also: Voluntary Organization;* 09852
Feldsher, *See also: Auxiliary Health Worker;* 09816
Filariasis, *See also: Parasitic Diseases;* 09804, 09959, 09966, 10026, 10358, 10401, 10459
Financial Aspect, *See also: Health Economics;* 09831, 09844, 09845, 09840, 09851, 09862, 09867, 09876, 09885, 09892, 09919, 09921, 09922, 09923, 09920, 09953, 09964, 10006, 10014, 10045, 10056, 10106, 10168, 10162, 10179, 10174, 10206, 10230, 10245, 10250, 10276, 10274, 10272, 10277, 10271, 10275, 10280, 10285, 10284, 10286, 10282, 10305, 10344, 10397, 10473
First Aid, *See also: Emergency Medical Care;* 10117, 10136, 10142, 10155, 10170
Folklore, *See also: Culture;* 10299, 10304
Food, *See also: Diet; Hygiene; Nutrition;* 09806, 09802, 09842, 09848, 09890, 09942, 09949, 09951, 09964, 09971, 09995, 09999, 09996, 10000, 10011, 10025, 10057, 10079, 10081, 10135, 10139, 10138, 10147, 10149, 10161, 10191, 10207, 10206, 10232, 10258, 10250, 10306, 10316, 10335, 10344, 10345, 10343, 10347, 10360, 10378, 10370, 10375, 10385, 10383, 10397, 10404, 10405, 10428, 10427, 10426, 10435, 10440, 10441, 10452, 10455, 10458, 10473, 10485, 10495, 10492, 10494
Food Production, *See also: Agricultural Sector;* 09801, 09848, 09941, 09949, 09951, 09995, 09999, 10000, 10025, 10024, 10039, 10149, 10232, 10250, 10374, 10435, 10473

G

Gastroenteritis, *See also: Enteric Diseases;* 10013, 10348, 10380, 10439, 10480
Geriatrics, 09870, 09884, 10043, 10051, 10347
Glaucoma, *See also: Eye Diseases;* 09992, 10027, 10151, 10342
Goitre, *See also: Nutrition;* 10081, 10315, 10329, 10410
Government, 10124, 10218, 10305
Government Policy, *See also: Planning, Development; Political Aspect;* 09810, 09818, 09815, 09826, 09830, 09831, 09848, 09849, 09853, 09859, 09858, 09861, 09876, 09886, 09888, 09884, 09885, 09894, 09890, 09895, 09907, 09900, 09911, 09913, 09921, 09922, 09928, 09923, 09933, 09934, 09940, 09952, 09991, 09995, 09999, 10000, 10072, 10096, 10116, 10193, 10216, 10211, 10232, 10243, 10247, 10257, 10253, 10255, 10267, 10268, 10270, 10316, 10375, 10435, 10451
Government Project, *See also: Pilot Project;* 09829, 09830, 09840, 09851, 09908, 10008, 10065, 10111, 10189, 10205, 10217, 10239, 10234, 10240, 10289, 10361
Guinea Worm, *See also: Parasitic Diseases;* 10187
Gynaecology, *See also: Maternal Child Health; Obstetrics;* 10098, 10171, 10337

H

Haemorrhagic Fever, *See also: Infectious Diseases;* 09974, 10159, 10368, 10384
Handbook, *See also: Teaching Aid;* 09808, 10135, 10139, 10136, 10137, 10133, 10138, 10134, 10145, 10148, 10140, 10147, 10146, 10144, 10149, 10143, 10142, 10157, 10156, 10155, 10159, 10152, 10151, 10153, 10150, 10163, 10161, 10168, 10169, 10162, 10166, 10160, 10164, 10173, 10170, 10172
Handbook, Administrator, 10153
Handbook, Child Health, 10147, 10144, 10143, 10173
Handbook, Community Health Worker, 10148, 10140, 10147, 10155, 10170
Handbook, Construction, 10145
Handbook, Disease Control, 10157, 10156, 10158, 10159, 10151, 10162, 10160
Handbook, Dispensary Attendant, 10155
Handbook, Emergency Medical Care, 10136
Handbook, First Aid, 10136, 10142
Handbook, Health Education, 10149
Handbook, Hygiene, 10161
Handbook, Laboratory, 10150
Handbook, Leprosy, 10169
Handbook, Maternal Child Health, 10173, 10171
Handbook, Medical Assistant, 10148, 10162
Handbook, Midwife, 10173
Handbook, Nurse, 10141
Handbook, Nutrition, 10139, 10138, 10147
Handbook, Occupational Health, 10137
Handbook, Physician, 10144, 10158, 10162
Handbook, Planning, 10135, 10133, 10153, 10168, 10166
Handbook, Rural Medical Aid, 10155
Handbook, Sanitation, 10134
Handbook, Teacher, 10163, 10164
Handbook, Training, 10163
Handbook, Waste Disposal, 10146
Handbook, Water Supply, 10146
Health Centre, *See also: Clinic; Dispensary; Construction, Health Centre; Hospital; Inpatient Care; Mobile Health Unit; Rural Health Post;* 09873, 09975, 10040, 10046, 10058, 10079, 10099, 10115, 10127, 10136, 10174, 10201, 10219, 10228, 10221, 10242, 10256, 10262, 10311, 10393, 10453
Health Economics, *See also: Cost-benefit Analysis; Costs and Cost Analysis; Direct Service Costs; Economic Development; Financial Aspect;* 09859, 09917, 09921, 09920, 10276, 10277, 10271, 10281
Health Educator, *See also: Health Manpower;* 10074, 10165
Health Extension Officer, *See also: Auxiliary Health Worker;* 10113
Health Indicators, *See also: Epidemiology; Evaluation, Health; Health Status;* 09863, 09886, 09903, 09912, 10008, 10243, 10247, 10275, 10371, 10499, 10496
Health Manpower, *See also: Administrator; Anaesthetist; Auxiliary Health Worker; Dental Manpower; Family Planning Manpower; Health Educator; Health Officer; Health Team; Mental Health Manpower; Midwife; Nurse; Nurse-midwife; Occupational Therapist; Ophthalmologist; Pharmacist; Physician; Physiotherapist; Sanitation Manpower; Social*

Worker; Teacher; Volunteer; X-ray Technician; 09816, 09810, 09818, 09817, 09815, 09819, 09822, 09829, 09836, 09839, 09840, 09841, 09873, 09894, 09904, 09916, 09928, 09936, 10049, 10055, 10065, 10179, 10177, 10184, 10194, 10238, 10239, 10248, 10267, 10268, 10276, 10270

Health Officer, *See also: Health Manpower;* 10102

Health Services, *See also: Administration, Health Services; Child Health Services; Dental Services; Distribution, Health Services; Emergency Health Services; Environmental Health Services; Evaluation, Health Services; Home Visiting; Maternal Child Health Services; Mental Health Services; Nursing Services; Organization, Health Services; Planning, Health Services; Radiology; Rehabilitation Services; Sanitation Services;* 09809, 09803, 09807, 09810, 09828, 09829, 09820, 09836, 09838, 09830, 09834, 09839, 09831, 09844, 09841, 09852, 09853, 09856, 09851, 09857, 09858, 09861, 09862, 09865, 09866, 09876, 09879, 09873, 09870, 09874, 09888, 09884, 09881, 09889, 09893, 09894, 09895, 09898, 09907, 09902, 09904, 09906, 09917, 09912, 09913, 09919, 09918, 09922, 09928, 09920, 09938, 09933, 09939, 09936, 09990, 09996, 10049, 10045, 10044, 10057, 10066, 10065, 10060, 10108, 10102, 10153, 10168, 10193, 10190, 10196, 10206, 10219, 10213, 10221, 10220, 10229, 10223, 10238, 10230, 10239, 10233, 10245, 10243, 10249, 10248, 10247, 10242, 10251, 10256, 10253, 10260, 10261, 10268, 10277, 10275, 10297, 10295, 10298, 10304, 10309, 10301, 10314, 10310, 10311, 10348, 10359, 10386, 10393, 10413, 10496, 10496, 10492

Health Status, *See also: Health Indicators;* 10499

Health Team, *See also: Health Manpower;* 09816, 09873, 10044, 10108, 10103, 10114

Hilot, *See also: Traditional Birth Attendant;* 10239

History of Health Services, *See also: Traditional Medicine;* 09830, 09849, 09841, 09854, 09907, 09958, 10218

Home Visiting, *See also: Health Services;* 10453

Hookworm, *See also: Parasitic Diseases;* 09946, 09959, 09963, 09960, 10056, 10312, 10385, 10436, 10437, 10438

Hospital, *See also: Health Centre; Hospital, Rural;* 09828, 09820, 09832, 09840, 09873, 09396, 09909, 09935, 09989, 10049, 10040, 10046, 10047, 10045, 10044, 10054, 10050, 10052, 10063, 10086, 10092, 10105, 10103, 10107, 10109, 10156, 10175, 10199, 10204, 10220, 10230, 10256, 10267, 10270, 10275, 10292, 10292, 10311, 10332, 10331, 10337, 10352, 10380, 10406, 10411, 10420, 10421, 10457, 10454, 10462, 10476

Hospital, Rural, *See also: Hospital;* 09840, 10048

Housing, *See also: Living Conditions;* 10153

Hygiene, *See also: Food; Living Conditions; Sanitation;* 09842, 10000, 10058, 10071, 10084, 10086, 10094, 10141, 10149, 10142, 10153, 10161, 10167, 10170, 10191, 10215, 10335, 10439, 10492

I

IBRD, *See also: International Organization;* 10243

Immunization, *See also: Disease Control; Vaccination; Vaccination Programme;* 09834, 09879, 09965, 09970, 09981, 09986, 09997, 10014, 10029, 10032, 10083, 10147, 10144, 10159, 10175, 10228, 10237, 10236, 10241, 10283, 10325, 10462, 10490

Infant Feeding, *See also: Breast-feeding; Child Health; Infants; Nutrition;* 09801, 09802, 09951, 09971, 09985, 09991, 09999, 09997, 09996, 10000, 10025, 10024, 10079, 10139, 10138, 10147, 10170, 10177, 10287, 10309, 10345, 10347, 10359, 10377, 10370, 10404, 10405, 10402, 10435, 10439, 10458, 10451, 10470, 10495, 10494

Infants, *See also: Children; Infant Feeding; Maternal Child Health;* 09802, 09829, 09849, 09860, 09863, 09866, 09891, 09951, 09955, 09970, 09985, 10000, 10025, 10039, 10042, 10139, 10138, 10147, 10144, 10171, 10240, 10288, 10286, 10293, 10324, 10338, 10344, 10343, 10347, 10353, 10367, 10377, 10370, 10387, 10389, 10391, 10404, 10405, 10402, 10414, 10411, 10431, 10432, 10439, 10438, 10455, 10457, 10458, 10460, 10460, 10475, 10470, 10476, 10478, 10480, 10488, 10497

Infectious Diseases, *See also: Cholera; Diphtheria; Disease Control; Ear Diseases; Enteric Diseases; Epidemiology; Eye Diseases; Haemorrhagic Fever; Leprosy; Malaria; Measles; Parasitic Diseases; Pertussis; Poliomyelitis; Rabies; Respiratory Diseases; Sexually Transmissible Diseases; Skin Diseases; Smallpox; Tetanus; Tuberculosis; Typhoid Fever; Yellow Fever;* 09804, 09834, 09869, 09900, 09947, 09956, 09965, 10003, 10013, 10023, 10038, 10030, 10055, 10067, 10140, 10147, 10144, 10149, 10142, 10225, 10331, 10354, 10350, 10395, 10399, 10425, 10497

Information Service, *See also: Information System;* 09809, 09833, 09835, 10014

Information System, *See also: Data Collection; Information Service;* 09833, 09835, 09905, 09915, 09949, 10085, 10238, 10261, 10285

Inpatient Care, *See also: Health Centre;* 09909, 10046, 10043, 10048, 10045, 10044, 10054, 10051, 10052, 10063, 10064, 10156, 10192, 10311, 10463, 10480

International Aid, *See also: International Cooperation; US AID;* 09809, 09824, 09840, 09948, 09995, 10206, 10258, 10378

International Cooperation, *See also: International Aid;* 09818, 09824, 09826, 09832, 09845, 09851, 09858, 09860, 09870, 09904, 09914, 09917, 09913, 09948, 09981, 10007, 10044, 10055, 10160, 10184, 10213, 10226, 10231, 10261

International Organization, *See also: FAO; IBRD; PAHO; UN; Unesco; UNICEF; Voluntary Organization; WHO;* 09835, 09858

Intrauterine Device, *See also: Birth Control;* 09983, 10239

J

Jamkhed Project, India, *See also: Pilot Project;* 10225

Job Description, *See: specific health worker;* 09843, 09893, 09937, 10048, 10053, 10108, 10105, 10102, 10103, 10107, 10119, 10118, 10114, 10113, 10116, 10111, 10120, 10122, 10129, 10127, 10124, 10132, 10179, 10183, 10192, 10228

Job Description, Community Health Aide, 10114, 10111
Job Description, Community Health Worker, 10116, 10183, 10228
Job Description, Health Extension Officer, 10113
Job Description, Health Manpower, 09809
Job Description, Laboratory Auxiliary, 10127
Job Description, Nurse, 09843, 09893, 10053, 10107, 10119, 10118, 10179, 10192, 10242
Job Description, Nurse-midwife, 10120
Job Description, Occupational Therapist, 10132
Job Description, Physician, 10048, 10108, 10105, 10102, 10103, 10107
Job Description, Physiotherapist, 10129
Job Description, Traditional Birth Attendant, 10122, 10124
Job Description, Traditional Practitioner, 09937

K

Kwashiorkor, *See also: Nutrition;* 09955, 10009, 10377, 10470

L

Laboratory, *See also: Research Centre;* 09825, 09950, 09954, 10021, 10026, 10055, 10067, 10127, 10158, 10150, 10220, 10349, 10356, 10401, 10469
Language, *See also: Culture;* 09961, 10108, 10128
Legal Aspect, 09928, 10169
Legislation, *See also: Legislation, Health;* 09842, 09928, 09934, 09943, 10232, 10268, 10279
Legislation, Health, *See also: Legislation;* 09928, 09934, 10252
Leishmaniasis, *See also: Parasitic Diseases;* 09804, 09954, 09978, 10015, 10018, 10026, 10328, 10325, 10341
Leprosy, *See also: Infectious Diseases;* 09804, 09805, 09874, 09958, 09956, 09973, 10007, 10012, 10018, 10027, 10059, 10077, 10074, 10144, 10169, 10254, 10379, 10403, 10417, 10429
Life Expectancy, *See also: Demography; Mortality;* 09870, 09912, 10172
Living Conditions, *See also: Environmental Health; Housing; Hygiene; Slums;* 09861, 09878, 10065, 10314, 10399, 10499, 10492

M

Malaria, *See also: Infectious Diseases;* 09804, 09948, 09965, 09966, 09962, 09988, 09998, 10006, 10017, 10018, 10026, 10033, 10031, 10036, 10041, 10057, 10127, 10144, 10246, 10317, 10349, 10556, 10409, 10408, 10446, 10445, 10479, 10474, 10487
Marasmus, *See also: Nutrition;* 09955, 10377, 10470
Mass Campaign, 09846, 09877, 09948, 09966, 09981, 10005, 10006, 10036, 10056, 10072, 10081, 10231, 10447, 10445, 10450
Mass Campaign, Disease Control, *See also: Disease Control;* 09846, 09877, 09948, 09966, 09981, 10005, 10006, 10036, 10056, 10081, 10198, 10231, 10447, 10445, 10450
Mass Media, *See also: Annual Report; Bibliography; Communications; Periodical; Radio Communications;* 09944, 10068, 10072, 10073, 10083, 10133, 10200, 10202, 10212, 10290
Maternal Child Health, *See also: Antenatal Care; Child Health; Children; Clinic, Maternal Child Health; Family Health; Gynaecology; Infants; Maternal Child Health Services; Obstetrics; Postpartum Care;* 09834, 09849, 09900, 09943, 09976, 09972, 10104, 10100, 10123, 10141, 10167, 10173, 10171, 10170, 10239, 10241, 10290, 10293, 10343, 10364, 10377, 10393, 10431
Maternal Child Health Services, *See also: Health Services; Maternal Child Health;* 09849, 09910, 09943, 09976, 10052, 10063, 10065, 10222, 10241, 10240, 10303, 10313, 10393, 10451, 10488
Measles, *See also: Infectious Diseases;* 09871, 09953, 09977, 09981, 09986, 09994, 10002, 10029, 10042, 10138, 10175, 10195, 10280, 10283, 10300, 10323, 10333, 10354, 10400, 10454, 10465
Medex, *See also: Auxiliary Health Worker;* 09822
Medical Assistant, *See also: Auxiliary Health Worker;* 09997, 10148, 10162, 10174, 10178, 10176
Medical Officer, *See also: Physician;* 10048
Medical Records, *See also: Epidemiology; Medical Records Maintenance;* 09999, 10009, 10059, 10085, 10089, 10093, 10214, 10311, 10413
Medical Records Maintenance, *See also: Medical Records;* 09891, 10059, 10085, 10089, 10148, 10169
Medicinal Plant, *See also: Drugs; Traditional Medicine;* 09931, 10308
Mental Health, 09813, 09826, 09823, 09855, 09961, 10075, 10204, 10295, 10332, 10433
Mental Health Manpower, *See also: Health Manpower; Nurse, Mental Health; Psychiatrist;* 09813, 09823
Mental Health Services, *See also: Health Services; Psychiatry;* 09826, 09823, 09855, 09925, 10054, 10053, 10192, 10204, 10332, 10433
Mental Retardation, *See also: Nutrition;* 10375, 10433
Methodology, 09806, 09811, 09812, 09822, 09857, 09869, 09867, 09868, 09871, 09875, 09879, 09873, 09877, 09887, 09886, 09884, 09885, 09881, 09883, 09889, 09882, 09891, 09897, 09890, 09895, 09901, 09903, 09902, 09908, 09905, 09911, 09912, 09913, 09918, 09921, 09922, 09924, 09948, 09957, 10004, 10012, 10029, 10037, 10049, 10066, 10088, 10096, 10135, 10133, 10148, 10143, 10153, 10168, 10179, 10185, 10189, 10187, 10186, 10207, 10202, 10208, 10217, 10212, 10211, 10221, 10224, 10229, 10243, 10249, 10248, 10247, 10257, 10250, 10260, 10276, 10272, 10292, 10293, 10329, 10339, 10341, 10350, 10360, 10369, 10361, 10373, 10376, 10382, 10381, 10398, 10391, 10407, 10428, 10440, 10441, 10472, 10487, 10483, 10489, 10499
Methodology, Evaluation, 09903, 09908, 09912, 10088, 10148, 10178, 10185, 10189, 10186, 10202, 10217, 10212, 10229, 10243, 10248, 10247, 10250, 10360, 10369, 10412, 10428, 10440, 10441, 10499
Methodology, Planning, 09811, 09812, 09822, 09857, 09858, 09869, 09867, 09871, 09875, 09879, 09873, 09877, 09887, 09886, 09884, 09885, 09881, 09883, 09889, 09897, 09890, 09895, 09901, 09902, 09905, 09911, 09913, 09918, 09921, 09922, 09924, 09948,

09957, 09990, 10004, 10012, 10029, 10056, 10096, 10135, 10133, 10153, 10168, 10179, 10211, 10249, 10257, 10260, 10276
Methodology, Research, *See also: Research;* 10012, 10292
Methodology, Screening, 10376
Methodology, Survey, 09806, 09868, 10004, 10207, 10221, 10224, 10222, 10231, 10272, 10297, 10314, 10313, 10329, 10339, 10341, 10350, 10361, 10373, 10386, 10398, 10391, 10407, 10439, 10472, 10487, 10483, 10489, 10500
Midwife, *See also: Health Manpower; Traditional Birth Attendant;* 09816, 10080, 10173, 10222, 10239, 10241, 10253, 10299
Migration, *See also: Brain Drain; Demography; Urbanization;* 09808, 09866, 09899, 09916, 10011, 10030, 10172, 10226, 10266, 10265, 10302
Military, 10062, 10178
Minority Groups, *See also: Aborigines; Nomads; Tribes;* 10233, 10414
Missionary, *See also: Volunteer;* 09975, 10311
Mobile Dental Unit, 10215
Mobile Eye Unit, 10066
Mobile Health Unit, *See also: Health Centre;* 10067
Morbidity, *See also: Evaluation, Health; Statistical Data;* 09808, 09806, 09805, 09834, 09861, 09883, 09912, 09946, 09945, 09947, 09953, 09959, 09965, 09963, 09960, 09974, 09975, 09978, 09984, 09990, 09993, 09994, 10007, 10010, 10027, 10028, 10022, 10037, 10042, 10046, 10041, 10041, 10048, 10058, 10062, 10103, 10172, 10198, 10211, 10225, 10224, 10226, 10233, 10231, 10235, 10243, 10246, 10254, 10272, 10283, 10298, 10304, 10302, 10318, 10313, 10319, 10315, 10322, 10323, 10329, 10326, 10325, 10321, 10332, 10330, 10331, 10341, 10342, 10348, 10346, 10354, 10355, 10352, 10358, 10357, 10365, 10363, 10362, 10368, 10376, 10386, 10388, 10384, 10392, 10393, 10390, 10395, 10394, 10396, 10399, 10406, 10401, 10405, 10407, 10403, 10418, 10410, 10415, 10417, 10416, 10411, 10420, 10422, 10425, 10424, 10421, 10429, 10436, 10433, 10437, 10439, 10438, 10449, 10443, 10448, 10446, 10459, 10453, 10454, 10467, 10466, 10462, 10461, 10460, 10475, 10479, 10474, 10471, 10487, 10483, 10489, 10488, 10491, 10498, 10496, 10490
Mortality, *See also: Demography; Life Expectancy; Statistical Data;* 09808, 09806, 09802, 09805, 09829, 09849, 09861, 09860, 09863, 09868, 09866, 09883, 09891, 09892, 09912, 09945, 09947, 09985, 09996, 10008, 10000, 10046, 10058, 10064, 10062, 10103, 10121, 10172, 10198, 10211, 10225, 10239, 10233, 10231, 10241, 10244, 10243, 10240, 10288, 10283, 10286, 10293, 10296, 10323, 10324, 10320, 10325, 10338, 10331, 10348, 10353, 10354, 10355, 10352, 10357, 10361, 10368, 10371, 10386, 10380, 10387, 10394, 10391, 10400, 10414, 10411, 10419, 10422, 10453, 10454, 10462, 10461, 10460, 10475, 10476, 10478, 10488, 10499, 10497, 10496, 10490
Mortality, Child, 09953, 09996, 10240, 10286, 10313, 10324, 10331, 10353, 10371, 10380, 10387, 10391, 10400, 10454, 10462, 10475
Mortality, Infant, 09802, 09829, 09849, 09860, 09863, 09866, 09891, 09892, 09985, 10000, 10052, 10240, 10288, 10286, 10293, 10299, 10313, 10324, 10320, 10338, 10353, 10387, 10382, 10391, 10414, 10411, 10451, 10460, 10475, 10476, 10478, 10488, 10497
Mortality, Maternal, 09849, 10121, 10451

N

National Health Plan, *See also: Planning, Health Services; Planning, National;* 09844, 09858, 09876, 09886, 09882, 09894, 10211, 10218, 10256, 10252
National Plan, *See also: Planning, National;* 09818, 09841, 09885, 09949, 10209, 10216, 10257
Nomads, *See also: Minority Groups;* 10206, 10316
Nurse, *See also: Community Nurse; Health Manpower; Nurse, Mental Health; Nurse-midwife; Nurse Practitioner;* 09816, 09843, 09893, 09916, 10053, 10107, 10119, 10118, 10117, 10179, 10181, 10192, 10201, 10214, 10242, 10265
Nurse Practitioner, *See also: Nurse;* 10065, 10179, 10174, 10178, 10276
Nurse, Mental Health, *See also: Mental Health Manpower; Nurse;* 10053, 10192
Nurse-midwife, *See also: Health Manpower; Nurse; Traditional Birth Attendant;* 10120, 10451
Nursing Services, *See also: Health Services;* 10201
Nutrition, *See also: Anaemia; Anthropometric Measurement; Diet; Food; Goitre; Infant Feeding; Kwashiorkor; Marasmus; Mental Retardation; Nutrition Programme; Vitamin Deficiency;* 09804, 09806, 09806, 09802, 09848, 09867, 09872, 09887, 09882, 09890, 09903, 09905, 09942, 09949, 09951, 09956, 09955, 09964, 09968, 09961, 09960, 09967, 09976, 09971, 09975, 09984, 09991, 09995, 09997, 09996, 10008, 10004, 10009, 10003, 10016, 10011, 10023, 10025, 10024, 10039, 10057, 10063, 10079, 10090, 10093, 10135, 10139, 10133, 10138, 10147, 10144, 10160, 10170, 10189, 10200, 10203, 10216, 10225, 10228, 10227, 10238, 10232, 10235, 10243, 10258, 10257, 10250, 10281, 10298, 10296, 10306, 10309, 10314, 10316, 10320, 10336, 10335, 10345, 10340, 10343, 10348, 10347, 10360, 10367, 10369, 10364, 10366, 10373, 10373, 10374, 10377, 10378, 10370, 10375, 10383, 10389, 10397, 10390, 10395, 10404, 10400, 10405, 10402, 10412, 10415, 10428, 10427, 10435, 10434, 10441, 10452, 10457, 10458, 10463, 10468, 10464, 10472, 10471, 10473, 10470, 10482, 10485, 10499, 10492, 10494
Nutrition Programme, *See also: Nutrition;* 09806, 09848, 09872, 09886, 09949, 09964, 09975, 09997, 10008, 10016, 10057, 10063, 10133, 10143, 10206, 10203, 10217, 10216, 10225, 10232, 10257, 10344, 10345, 10340, 10343, 10343, 10378, 10375, 10383, 10452, 10455, 10464

O

Obstetrics, *See also: Gynaecology; Maternal Child Health; Parturition; Pregnancy;* 10052, 10098, 10171, 10411, 10451
Occupational Health, *See also: Ergonomics;* 09817, 09834, 10137, 10149, 10191, 10314

Occupational Therapist, *See also: Health Manpower;* 09927, 10132
Occupational Therapy, *See also: Rehabilitation Services;* 09927
Onchocerciasis, *See also: Parasitic Diseases;* 09992, 10018, 10026, 10020, 10158, 10226, 10246, 10318, 10330, 10450
Ophthalmologist, *See also: Health Manpower;* 09836
Ophthalmology, *See also: Eye Diseases;* 09836, 10066, 10158, 10151, 10448
Oral Contraceptive, *See also: Birth Control;* 09983
Oral Rehydration, *See also: Disease Control;* 09997, 10001, 10019, 10084, 10091, 10147, 10156, 10235, 10334, 10419, 10426, 10432, 10430, 10453, 10480, 10495
Organization, *See: specific service or activity;* 09816, 09810, 09819, 09824, 09828, 09826, 09829, 09827, 09820, 09833, 09838, 09832, 09830, 09834, 09837, 09839, 09842, 09843, 09848, 09844, 09849, 09840, 09846, 09852, 09855, 09850, 09853, 09851, 09857, 09862, 09865, 09872, 09876, 09871, 09873, 09877, 09874, 09895, 09909, 09928, 09925, 09938, 09933, 09939, 09936, 09948, 09949, 09962, 09973, 09974, 09990, 09993, 09992, 10006, 10016, 10010, 10018, 10036, 10032, 10046, 10041, 10044, 10054, 10053, 10057, 10052, 10063, 10065, 10061, 10060, 10077, 10081, 10099, 10108, 10102, 10189, 10184, 10188, 10187, 10192, 10194, 10193, 10190, 10199, 10197, 10201, 10200, 10208, 10206, 10203, 10204, 10216, 10211, 10213, 10218, 10220, 10227, 10226, 10233, 10232, 10234, 10231, 10235, 10241, 10244, 10240, 10251, 10253, 10267, 10274, 10277, 10297, 10295, 10304, 10309, 10310, 10332, 10385, 10455
Organization, Child Health Services, 09829, 09909, 10188
Organization, Dental Services, 09824
Organization, Disease Control, 09837, 09842, 09846, 09850, 09948, 09962, 09973, 09974, 09993, 09992, 10006, 10018, 10036, 10041, 10199, 10197, 10226, 10235, 10244, 10385
Organization, Emergency Health Services, 09827, 09832
Organization, Family Planning Programme, 10241
Organization, Health Centre, 10099, 10141, 10201
Organization, Health Education, 10077
Organization, Health Manpower, 09928
Organization, Health Services, *See also: Health Services;* 09809, 09816, 09810, 09828, 09838, 09830, 09834, 09839, 09844, 09852, 09853, 09851, 09857, 09862, 09865, 09876, 09873, 09874, 09895, 09928, 09938, 09933, 09939, 09936, 09990, 09997, 10044, 10057, 10065, 10061, 10060, 10108, 10102, 10141, 10193, 10190, 10206, 10211, 10213, 10218, 10220, 10238, 10233, 10251, 10253, 10267, 10277, 10297, 10295, 10304, 10309, 10310, 10348
Organization, Health Team, 09873
Organization, Hospital, 10046
Organization, Mass Campaign, 09877, 10036, 10081
Organization, Maternal Child Health Services, 09849, 10052, 10063, 10222, 10241, 10451
Organization, Mental Health Services, 09826, 09855, 09925, 10054, 10053, 10192, 10204, 10332
Organization, Nutrition Education, 10200
Organization, Nutrition Programme, 09806, 09848, 09872, 09949, 10016, 10203, 10216, 10227, 10232, 10455
Organization, Project, 09843, 09851, 10189, 10234, 10240
Organization, Rehabilitation Services, 10194
Organization, Training, 09819, 09820
Organization, Tuberculosis Programme, 10198, 10197
Organization, Vaccination Programme, 09871, 10010, 10032, 10208, 10274
Outpatient Care, 09909, 10037, 10046, 10054, 10053, 10058, 10059, 10063, 10066, 10062, 10089, 10186, 10192, 10282, 10311

P

PAHO, 09842, 09858, 09917, 09986, 10153, 10446
Paramedic, *See also: Auxiliary Health Worker;* 10448
Parasitic Diseases, *See also: Ascariasis; Filariasis; Guinea Worm; Hookworm; Infectious Diseases; Leishmaniasis; Onchocerciasis; Schistosomiasis; Trypanosomiasis;* 09804, 09848, 09900, 09946, 09959, 09956, 09963, 09966, 09960, 09978, 10017, 10026, 10056, 10144, 10322, 10365, 10373, 10390, 10395, 10409, 10436, 10437, 10466, 10471
Parturition, *See also: Obstetrics; Pregnancy;* 09834, 09942, 09972, 10123, 10122, 10121, 10171, 10299, 10367, 10411, 10451
Pediatrics, *See also: Child Health;* 09832, 09909, 10003, 10098, 10107, 10144, 10151, 10171, 10334, 10421, 10462
Periodical, *See also: Mass Media;* 09809, 09807
Pertussis, *See also: Infectious Diseases;* 09871, 10029, 10237, 10354
Pest Control, *See also: Disease Control;* 09804, 09957, 09962, 10006, 10013, 10033, 10226, 10246, 10341, 10368, 10372, 10418, 10467
Pharmacist, *See also: Health Manpower;* 10040
Pharmacy, *See also: Drugs;* 09845, 09862, 09907, 10219, 10234, 10285, 10423
Physical Examination, *See also: Evaluation, Health;* 10315, 10449
Physician, *See also: Health Manpower; Medical Officer;* 09811, 09812, 09815, 09819, 09814, 09825, 09841, 09892, 09915, 09916, 10046, 10048, 10098, 10097, 10099, 10108, 10101, 10105, 10104, 10106, 10102, 10103, 10107, 10109, 10100, 10144, 10154, 10162, 10179, 10174, 10185, 10181, 10182, 10256, 10255, 10266, 10269, 10264, 10263, 10270, 10305, 10493
Physiotherapist, *See also: Health Manpower; Rehabilitation;* 09927, 10129
Physiotherapy, *See also: Rehabilitation Services;* 10129
Pilot Project, *See also: Danfa Project, Ghana; Government Project; Jamkhed Project, India;* 09805, 09835, 09843, 09861, 09860, 09887, 09908, 09924, 09929, 09939, 10019, 10054, 10071, 10075, 10074, 10095, 10114, 10121, 10187, 10196, 10219, 10228, 10238, 10231, 10241, 10243, 10386, 10399
Planning, *See: specific service or activity;* 09809, 09806, 09811, 09812, 09810, 09818, 09817, 09813, 09815, 09819, 09814, 09821, 09824, 09822, 09826, 09823,

09830, 09837, 09839, 09835, 09842, 09844, 09847, 09840, 09841, 09855, 09850, 09853, 09856, 09859, 09851, 09857, 09858, 09869, 09861, 09860, 09862, 09865, 09867, 09864, 09868, 09866, 09872, 09871, 09875, 09879, 09873, 09878, 09877, 09870, 09874, 09887, 09886, 09888, 09884, 09885, 09881, 09880, 09883, 09889, 09882, 09896, 09893, 09894, 09899, 09897, 09890, 09895, 09898, 09901, 09903, 09902, 09904, 09908, 09905, 09909, 09906, 09900, 09911, 09914, 09912, 09913, 09919, 09910, 09918, 09921, 09922, 09924, 09930, 09933, 09939, 09934, 09948, 09946, 09940, 09947, 09957, 09950, 09953, 09959, 09964, 09968, 09965, 09966, 09962, 09967, 09974, 09976, 09971, 09977, 09989, 09988, 09980, 09981, 09986, 09982, 09987, 09998, 09990, 09992, 09995, 09997, 10005, 10008, 10004, 10006, 10007, 10003, 10002, 10017, 10013, 10016, 10012, 10010, 10019, 10014, 10018, 10023, 10021, 10029, 10026, 10020, 10022, 10037, 10031, 10034, 10035, 10039, 10036, 10032, 10042, 10041, 10056, 10052, 10061, 10076, 10071, 10072, 10081, 10089, 10096, 10097, 10092, 10099, 10101, 10104, 10126, 10122, 10125, 10129, 10128, 10135, 10131, 10139, 10133, 10132, 10138, 10143, 10159, 10153, 10163, 10168, 10169, 10166, 10160, 10164, 10179, 10184, 10180, 10194, 10200, 10203, 10209, 10215, 10211, 10213, 10218, 10225, 10222, 10227, 10238, 10231, 10245, 10249, 10240, 10248, 10247, 10246, 10258, 10257, 10251, 10256, 10253, 10250, 10255, 10259, 10252, 10254, 10260, 10261, 10267, 10269, 10276, 10277, 10283, 10306, 10307, 10300, 10319, 10310, 10320, 10359, 10374, 10372, 10375, 10452, 10451, 10464, 10479, 10489, 10496

Planning, Child Health Services, 09909, 10003

Planning, Dental Health Education, 10215

Planning, Dental Manpower, 09821

Planning, Dental Services, 09821, 09824, 09967, 10215

Planning, Development, *See also: Community Development; Economic Development; Government Policy; Rural Development; Social Development;* 09859, 09861, 09867, 09864, 09878, 09888, 09882, 09899, 09904, 09971, 10184, 10203, 10238, 10246, 10258, 10257, 10256, 10259, 10375

Planning, Disease Control, 09837, 09842, 09850, 09869, 09924, 09948, 09946, 09947, 09957, 09959, 09968, 09965, 09966, 09962, 09974, 09989, 09988, 09986, 09982, 09987, 09998, 09990, 09992, 10005, 10006, 10007, 10017, 10013, 10012, 10019, 10018, 10021, 10026, 10020, 10022, 10037, 10031, 10034, 10035, 10036, 10041, 10159, 10169, 10160, 10249, 10246, 10254, 10319, 10372, 10479, 10489

Planning, Emergency Health Services, 09869

Planning, Environmental Health Services, 09847

Planning, Family Planning Programme, 10307

Planning, Health Education, 09897, 10076, 10072, 10096, 10300, 10359

Planning, Health Manpower, 09818, 09817, 09815, 09822, 09841, 09882, 10179, 10184, 10276

Planning, Health Services, *See also: Health Services; National Health Plan;* 09809, 09810, 09830, 09839, 09844, 09840, 09841, 09853, 09856, 09857, 09858, 09862, 09865, 09866, 09876, 09879, 09873, 09870, 09874, 09888, 09884, 09889, 09882, 09893, 09894, 09895, 09898, 09902, 09904, 09906, 09911, 09912, 09913, 09919, 09918, 09921, 09922, 09933, 09939, 09990, 10061, 10141, 10153, 10168, 10211, 10213, 10218, 10238, 10245, 10249, 10248, 10247, 10251, 10256, 10253, 10259, 10261, 10277, 10310, 10496

Planning, Mass Campaign, 09877, 09948, 09966, 09981, 10006, 10036, 10056, 10081

Planning, Maternal Child Health Services, 09910, 09976, 10052, 10222, 10451

Planning, Mental Health Services, 09826, 09855

Planning, National, *See also: National Health Plan; National Plan;* 09815, 09859, 09858, 09886, 09906, 09900, 09912, 09913, 09921, 09933, 09934, 09940, 10125, 10135, 10168, 10258, 10253, 10255, 10252

Planning, Nutrition, 09890, 09903, 09905, 09995, 09997, 10004, 10023, 10039, 10135, 10139, 10133, 10203, 10258, 10257, 10250, 10320, 10347, 10375, 10452

Planning, Nutrition Education, 10227

Planning, Nutrition Programme, 09806, 09872, 09964, 09997, 10008, 10016, 10133, 10143, 10227, 10257, 10464

Planning, Project, 09835, 09840, 09851, 09857, 09860, 09887, 09924, 10143, 10209, 10225, 10238, 10231, 10240

Planning, Rehabilitation Services, 10132, 10194

Planning, Research, 09885

Planning, Sanitary Facilities, 09901

Planning, Sanitation Services, 09880, 10014

Planning, Survey, 09868

Planning, Training, 09811, 09812, 09810, 09813, 09819, 09814, 09823, 09831, 09831, 09860, 09940, 10071, 10097, 10099, 10101, 10104, 10126, 10122, 10125, 10128, 10131, 10163, 10164, 10255, 10269

Planning, Tuberculosis Programme, 09883

Planning, Vaccination Programme, 09871, 09950, 09953, 09977, 09980, 10002, 10012, 10010, 10029, 10032, 10042, 10283

Planning, Water Supply, 09880, 09901, 09930

Poisoning, *See also: Emergency Medical Care;* 10294

Poliomyelitis, *See also: Infectious Diseases;* 09804, 09871, 09982, 10010, 10029, 10028, 10208, 10272, 10354, 10362, 10447

Political Aspect, *See also: Government Policy; Socialism;* 09818, 09845, 09852, 09859, 09876, 09893, 09911, 09921, 09940, 10116, 10165, 10211, 10218, 10245, 10255, 10271

Population, *See also: Demography;* 09808, 09906, 10172, 10360

Population Increase, *See also: Demography;* 09808, 09886, 09906, 09900, 09956, 09975, 10172

Postpartum Care, *See also: Maternal Child Health;* 09849, 09942, 10063, 10141, 10171, 10210, 10293, 10451, 10488

Poverty, *See also: Slums;* 09801, 09878, 09899, 09945, 09941, 10008, 10030, 10116, 10434

Pregnancy, *See also: Antenatal Care; Obstetrics; Parturition;* 09834, 09863, 09942, 09964, 09972, 09984, 10083, 10123, 10141, 10214, 10228, 10299, 10337, 10344, 10345, 10340, 10343, 10348, 10347, 10367, 10369, 10364, 10386, 10397, 10390, 10471, 10488

Preventive Medicine, 09865, 09907, 09965, 09982, 10020, 10126, 10148, 10140, 10142, 10221, 10248, 10300, 10484
Primary Care, 09809, 09810, 09824, 09822, 09828, 09823, 09830, 09839, 09840, 09850, 09854, 09853, 09876, 09873, 09874, 09888, 09889, 09893, 09895, 09907, 09902, 09904, 09911, 09912, 09913, 09940, 09990, 10020, 10065, 10061, 10098, 10105, 10119, 10112, 10141, 10168, 10166, 10184, 10192, 10206, 10211, 10245, 10249, 10248, 10242, 10282, 10348
Psychiatry, *See also: Mental Health Services;* 09823, 09925, 10204
Psychological Aspect, 09952, 09966, 10142, 10180, 10200, 10306

Q

Questionnaire, *See also: Survey;* 10124, 10176, 10221, 10297, 10386, 10398, 10439, 10456

R

Rabies, *See also: Infectious Diseases;* 10021, 10355, 10352, 10394, 10413, 10490
Radio Communications, *See also: Mass Media;* 10069, 10072, 10083, 10081
Radiology, *See also: Health Services;* 10128
Refugees, 09832, 10044, 10057, 10175, 10206, 10295, 10492
Rehabilitation, *See also: Disabled; Physiotherapist;* 09893, 10145, 10194
Rehabilitation Services, *See also: Health Services; Occupational Therapy; Physiotherapy;* 10129, 10132, 10194
Research, *See also: Methodology, Research; Statistical Analysis; Survey;* 09850, 09885, 09881, 09900, 09939, 09936, 09931, 09956, 09969, 09973, 09974, 09972, 09979, 09986, 09991, 10008, 10001, 10017, 10012, 10014, 10023, 10033, 10034, 10035, 10055, 10133, 10160, 10250, 10292, 10336, 10334, 10341, 10356, 10388, 10412, 10440, 10441, 10484
Research Centre, *See also: Laboratory;* 09825, 09948, 10055
Research, Disease Control, 09850, 09931, 09969, 09966, 09973, 09974, 09979, 09986, 10001, 10017, 10012, 10033, 10034, 10035, 10036, 10055, 10356, 10388
Research, Family Planning, 09885, 09972
Research, Health Services, 09829, 09881, 09939
Research, Maternal Child Health, 09972
Research, Nutrition, 09806, 10023, 10347, 10412, 10440, 10441
Respiratory Diseases, *See also: Infectious Diseases;* 10331, 10395, 10498
Rural Area, 09829, 09833, 09844, 09840, 09851, 09880, 09915, 09941, 10048, 10069, 10061, 10108, 10103, 10127, 10138, 10174, 10196, 10215, 10221, 10223, 10233, 10234, 10251, 10256, 10266, 10267, 10264, 10270, 10297, 10293, 10303, 10304, 10318, 10313, 10325, 10359, 10358, 10357, 10368, 10391, 10412, 10434, 10430, 10442, 10487, 10485, 10486, 10491, 10495
Rural Development, *See also: Planning, Development;* 09887, 09880
Rural Health Post, *See also: Health Centre;* 10113, 10223, 10251
Rural Medical Aid, *See also: Auxiliary Health Worker;* 10155

S

Sanitary Engineer, *See also: Sanitation Manpower;* 10014
Sanitary Facilities, *See also: Construction, Sanitary Facilities; Sanitation;* 09803, 09901, 09930, 10134, 10191
Sanitation, *See also: Environmental Health; Hygiene; Sanitary Facilities; Waste Disposal;* 09835, 09869, 10013, 10019, 10058, 10130, 10134, 10142, 10161, 10191, 10238, 10259
Sanitation Manpower, *See also: Health Manpower; Sanitary Engineer;* 09835, 10019, 10019, 10131, 10130
Sanitation Services, *See also: Health Services;* 10019, 10014, 10153
Schistosomiasis, *See also: Parasitic Diseases;* 09804, 09834, 09924, 09957, 09966, 09980, 09987, 09998, 09993, 10018, 10026, 10158, 10246, 10284, 10321, 10346, 10372, 10392, 10406, 10407, 10418, 10467
School, *See also: Education; Training Centre; University;* 09807, 09811, 09812, 09915, 10097, 10099, 10101, 10106, 10109, 10100, 10182, 10255, 10319, 10437
School Health, *See also: Children; Students; Teacher;* 09834, 09897, 09971, 10063, 10161
School, Medical, 09807, 09811, 09812, 09819, 09915, 10097, 10099, 10101, 10106, 10109, 10100, 10182, 10255
Screening, *See also: Diagnosis;* 09910, 09955, 09973, 10087, 10088, 10095, 10093, 10148, 10197, 10228, 10244, 10376, 10449, 10444, 10448, 10483
Self-care, 09873, 09897
Sexually Transmissible Diseases, *See also: Infectious Diseases; Yaws;* 10037, 10302, 10379, 10376, 10443, 10456, 10483
Skin Diseases, *See also: Infectious Diseases; Scabies; Yaws;* 09968, 10328, 10379, 10416
Slums, *See also: Living Conditions; Poverty; Urbanization;* 10065, 10075, 10287, 10494
Smallpox, *See also: Infectious Diseases;* 09950
Social and Cultural Anthropology, *See also: Culture;* 09932, 10299, 10304
Social Aspect, 09801, 09843, 09860, 09867, 09864, 09886, 09882, 09897, 09904, 09912, 09927, 09940, 09953, 09965, 10008, 10061, 10108, 10169, 10184, 10198, 10190, 10217, 10211, 10225, 10221, 10229, 10271, 10288, 10292, 10293, 10296, 10306, 10307, 10314, 10332, 10357, 10373, 10374, 10407, 10443
Social Change, *See also: Social Development; Urbanization;* 09826, 09859, 09899, 09942, 09941, 09976, 10051, 10116, 10232, 10290, 10298, 10488, 10486
Social Development, *See also: Planning, Development; Social Change;* 09864, 09892, 09929, 09941, 10116, 10302
Social Participation, *See also: Community Development;* 09809, 09810, 09839, 09835, 09843, 09852, 09853, 09861, 09864, 09872, 09874, 09886, 09894,

09895, 09911, 09929, 09930, 09941, 09943, 09944, 09993, 10065, 10071, 10075, 10080, 10116, 10165, 10193, 10211, 10238, 10232, 10235, 10259, 10273
Social Sciences, 09811, 09966
Social Services, *See also: Child Care;* 09861, 09873, 09943
Social Structure, *See also: Family; Women;* 09941, 10011, 10292, 10296, 10302
Social Worker, *See also: Health Manpower;* 09927, 10228
Socialism, *See also: Political Aspect;* 09921
Socioeconomic Aspect, 09836, 09892, 09914, 09917, 09913, 09910, 09967, 10004, 10016, 10011, 10043, 10165, 10185, 10218, 10230, 10243, 10248, 10256, 10297, 10290, 10292, 10306, 10300, 10309, 10302, 10343, 10353, 10367, 10377, 10386, 10397, 10390, 10431, 10472, 10470, 10478, 10485, 10499, 10497, 10496
Socioeconomic Development, *See also: Economic Development; Planning, Development;* 09867, 10218, 10281, 10412, 10499
Statistical Analysis, *See also: Research; Statistical Data;* 09868, 09891, 09898, 09903, 10148, 10205, 10221, 10230, 10255, 10263, 10270, 10290, 10293, 10296, 10320, 10338, 10331, 10353, 10352, 10361, 10374, 10371, 10387, 10382, 10381, 10391, 10412, 10414, 10422, 10439, 10445, 10457, 10475, 10485, 10484, 10499, 10497
Statistical Data, *See also: Demography; Morbidity; Mortality; Statistical Analysis; Survey;* 09808, 09805, 09815, 09827, 09836, 09834, 09842, 09849, 09845, 09876, 09870, 09886, 09896, 09891, 09890, 09898, 09903, 09905, 09936, 09946, 09959, 09965, 09967, 09974, 09983, 09989, 09987, 09993, 09992, 10008, 10000, 10007, 10002, 10013, 10016, 10010, 10028, 10038, 10039, 10032, 10042, 10043, 10048, 10047, 10044, 10055, 10052, 10066, 10064, 10077, 10079, 10085, 10082, 10101, 10111, 10125, 10124, 10121, 10138, 10179, 10178, 10189, 10188, 10186, 10195, 10198, 10190, 10197, 10207, 10201, 10206, 10205, 10209, 10217, 10216, 10215, 10211, 10218, 10210, 10214, 10225, 10224, 10220, 10222, 10223, 10230, 10236, 10239, 10233, 10234, 10231, 10235, 10241, 10244, 10243, 10240, 10251, 10255, 10261, 10266, 10269, 10265, 10264, 10263, 10276, 10274, 10272, 10270, 10278, 10280, 10281, 10287, 10283, 10284, 10286, 10282, 10297, 10290, 10293, 10294, 10291, 10296, 10299, 10303, 10306, 10305, 10307, 10300, 10309, 10318, 10314, 10313, 10319, 10315, 10317, 10312, 10322, 10323, 10329, 10324, 10320, 10327, 10328, 10326, 10325, 10321, 10338, 10332, 10336, 10330, 10333, 10335, 10331, 10339, 10337, 10341, 10344, 10345, 10340, 10342, 10348, 10349, 10346, 10351, 10353, 10354, 10355, 10359, 10352, 10358, 10350, 10357, 10365, 10360, 10367, 10369, 10363, 10366, 10362, 10361, 10368, 10379, 10373, 10376, 10371, 10377, 10378, 10370, 10386, 10385, 10387, 10382, 10381, 10383, 10384, 10389, 10392, 10398, 10397, 10393, 10390, 10395, 10394, 10391, 10396, 10399, 10404, 10401, 10400, 10405, 10407, 10403, 10402, 10418, 10410, 10414, 10415, 10417, 10416, 10413, 10411, 10419, 10423, 10420, 10422, 10425, 10424, 10421, 10428, 10427, 10426, 10431, 10436, 10432, 10437, 10439, 10434, 10438, 10440, 10441, 10449, 10442, 10443, 10448, 10446, 10445, 10450, 10456, 10457, 10458, 10459, 10453, 10454, 10451, 10463, 10467, 10466, 10468, 10464, 10461, 10460, 10475, 10472, 10479, 10474, 10471, 10473, 10476, 10478, 10477, 10481, 10482, 10487, 10483, 10485, 10480, 10489, 10488, 10484, 10486, 10499, 10491, 10497, 10498, 10496, 10495, 10492, 10490, 10500
Student Selection, 10099, 10114, 10115, 10111, 10228, 10255
Students, *See also: Education; School Health;* 10154, 10284, 10318, 10315, 10322, 10365, 10398, 10448, 10456
Supervision, 09857, 10228, 10223
Supervision, Auxiliary, 10228
Surgery, *See also: Anaesthesia;* 09836, 09919, 09942, 10062, 10098, 10156
Survey, *See also: Attitudes; Data Collection; Demography; Epidemiology; Evaluation; Questionnaire; Research; Statistical Data;* 09868, 09896, 09906, 09939, 09946, 09959, 09963, 09977, 09987, 10004, 10002, 10049, 10040, 10072, 10079, 10082, 10124, 10148, 10160, 10177, 10176, 10186, 10191, 10207, 10201, 10205, 10221, 10224, 10222, 10230, 10231, 10262, 10265, 10272, 10287, 10286, 10282, 10297, 10290, 10292, 10293, 10291, 10296, 10306, 10309, 10301, 10318, 10314, 10313, 10316, 10319, 10315, 10312, 10322, 10329, 10324, 10327, 10328, 10326, 10332, 10330, 10335, 10339, 10337, 10341, 10340, 10342, 10348, 10348, 10346, 10356, 10351, 10353, 10359, 10358, 10350, 10365, 10363, 10364, 10366, 10362, 10361, 10368, 10373, 10377, 10370, 10386, 10380, 10387, 10381, 10383, 10384, 10389, 10398, 10393, 10390, 10395, 10394, 10391, 10396, 10399, 10406, 10401, 10400, 10407, 10403, 10402, 10410, 10415, 10417, 10416, 10413, 10423, 10420, 10422, 10421, 10428, 10427, 10431, 10435, 10433, 10437, 10439, 10434, 10438, 10449, 10442, 10444, 10443, 10448, 10446, 10450, 10456, 10457, 10459, 10454, 10466, 10464, 10472, 10479, 10474, 10470, 10478, 10482, 10487, 10483, 10485, 10489, 10488, 10499, 10493, 10491, 10498, 10492, 10494, 10500

T

Teacher, *See also: Education; Health Manpower; School Health;* 09812, 09814, 09860, 10077, 10130, 10163, 10164, 10272
Teaching Aid, *See also: Audiovisual Aid; Handbook; Teaching Method; Textbook; Training Manual;* 09809, 09831, 10068, 10073, 10081, 10082, 10112, 10130, 10154, 10165, 10164, 10167, 10171
Teaching Aid, Auxiliary, 10171
Teaching Aid, Environmental Health, 10130
Teaching Aid, Family Planning, 10073
Teaching Aid, Health Education, 10082, 10167
Teaching Aid, Tropical Medicine, 10154
Teaching Method, *See also: Teaching Aid;* 09814, 09997, 10069, 10078, 10070, 10082, 10110, 10112, 10130, 10163

Tetanus, *See also: Infectious Diseases;* 09804, 09871, 10029, 10063, 10083, 10237, 10313, 10354, 10476
Textbook, *See also: Teaching Aid;* 10158, 10154
Trachoma, *See also: Eye Diseases;* 09836, 09837, 09992, 09994, 10027, 10020, 10066, 10151, 10318, 10339, 10448
Tradition, *See also: Culture;* 09926, 09925, 09927, 09932, 09942, 10232, 10288, 10287, 10297, 10294, 10291, 10304, 10309, 10500
Traditional Birth Attendant, *See also: Auxiliary Health Worker; Hilot; Midwife; Nurse-midwife; Traditional Practitioner;* 09933, 09940, 10063, 10123, 10122, 10125, 10124, 10121, 10241, 10253, 10299, 10301, 10451, 10488
Traditional Medicine, *See also: Culture; History of Health Services; Medicinal Plant; Traditional Practitioner;* 09810, 09813, 09838, 09830, 09864, 09874, 09900, 09926, 09928, 09925, 09927, 09929, 09938, 09932, 09939, 09934, 09936, 09931, 09937, 09944, 10190, 10211, 10297, 10295, 10298, 10299, 10301, 10308, 10310, 10348
Traditional Practitioner, *See also: Traditional Birth Attendant; Traditional Medicine;* 09874, 09928, 09925, 09933, 09939, 09934, 09936, 09937, 09940, 10115, 10111, 10253, 10289, 10295, 10304, 10301, 10308, 10310
Training, 09809, 09811, 09812, 09816, 09810, 09817, 09813, 09819, 09814, 09824, 09829, 09825, 09823, 09820, 09836, 09835, 09840, 09841, 09850, 09860, 09871, 09873, 09895, 09904, 09900, 09940, 10036, 10046, 10055, 10063, 10065, 10061, 10071, 10078, 10070, 10074, 10080, 10098, 10097, 10099, 10108, 10101, 10105, 10104, 10106, 10103, 10109, 10100, 10110, 10114, 10112, 10111, 10117, 10126, 10123, 10122, 10125, 10129, 10128, 10124, 10121, 10131, 10133, 10132, 10130, 10143, 10154, 10163, 10169, 10165, 10164, 10171, 10175, 10185, 10180, 10183, 10182, 10219, 10228, 10220, 10222, 10223, 10255, 10269, 10289, 10448, 10493
Training Centre, *See also: Education; School; University;* 10220
Training Course, *See also: Curriculum of specific health worker;* 09831, 09940, 10054, 10074, 10098, 10104, 10100, 10110, 10111, 10123, 10122, 10128, 10121, 10130, 10183, 10289
Training Course, Auxiliary, 10110, 10111
Training Manual, *See also: Teaching Aid;* 10148, 10165, 10164, 10173, 10170
Training Manual, Community Health Worker, 10148, 10165, 10170
Training Manual, Health Educator, 10165
Training Manual, Medical Assistant, 10148
Training Manual, Midwife, 10173
Training Manual, Teacher, 10164
Training, Administrator, 09820, 09831
Training, Auxiliary, 10110, 10164, 10171, 10175, 10348
Training, Barefoot Doctor, 09819
Training, Child Health Associate, 10143
Training, Community Health Aide, 10114, 10111
Training, Community Health Worker, 09850, 09895, 09997, 10061, 10078, 10070, 10112, 10163, 10165, 10180, 10183, 10219, 10228
Training, Dental Manpower, 10126
Training, Dentist, 09824, 10126
Training, Health Educator, 10074, 10165
Training, Health Manpower, 09809, 09810, 09817, 09819, 09829, 09840, 09873, 09904, 10055, 10065, 10238, 10451
Training, Medical Assistant, 09997
Training, Mental Health Manpower, 09813, 09823
Training, Midwife, 10080, 10222
Training, Nurse, 10117
Training, Occupational Therapist, 10132
Training, Ophthalmic Medical Assistant, 09836
Training, Paramedic, 10448
Training, Physician, 09811, 09812, 09819, 09814, 09825, 09841, 10046, 10098, 10097, 10099, 10101, 10105, 10104, 10106, 10109, 10100, 10154, 10185, 10182, 10255, 10269, 10493
Training, Sanitation Manpower, 09835, 10131, 10130
Training, Teacher, 09814, 09860, 10130
Training, Traditional Birth Attendant, 09940, 10063, 10123, 10122, 10125, 10124, 10121
Training, Traditional Practitioner, 09940, 10289
Training, Volunteer, 10071
Training, X-ray Technician, 10128
Transport, 09862, 10146, 10159, 10195, 10453
Tribes, *See also: Canadian Indian Health Service; Minority Groups; Yoruba;* 09850, 09861, 09927, 10103, 10118, 10111, 10122, 10297, 10298, 10299, 10300, 10304, 10308, 10323, 10378, 10396, 10457, 10467, 10479, 10498
Tropical Area, 09965, 10005, 10026, 10030, 10067, 10145, 10142, 10158
Tropical Medicine, 09965, 09979, 09990, 10154
Trypanosomiasis, *See also: Parasitic Diseases;* 09804, 09966, 10017, 10018, 10026, 10158, 10246
Tuberculosis, *See also: Infectious Diseases; Tuberculosis Programme;* 09804, 09834, 09871, 09956, 09982, 10029, 10022, 10144, 10186, 10198, 10237, 10414, 10444, 10461, 10489
Tuberculosis Programme, *See also: BCG Vaccination; Tuberculosis;* 09883, 10198, 10197
Typhoid Fever, *See also: Infectious Diseases;* 09989, 10424

U

Unesco, *See also: International Organization;* 09860
UNICEF, *See also: International Organization;* 10008
University, *See also: School; Training Centre;* 09839, 09939, 10055, 10114
Urban Area, 09827, 10065, 10108, 10208, 10224, 10233, 10256, 10263, 10287, 10303, 10313, 10338, 10359, 10357, 10384, 10391, 10412, 10434, 10442, 10477, 10485, 10494
Urbanization, *See also: Cultural Change; Migration; Social Change; Slums;* 09808, 09866, 09899, 09917, 10172
US AID, *See also: International Aid;* 09840, 09851, 09948
Utilization Rate, 09827, 10040, 10043, 10052, 10115, 10181, 10186, 10190, 10196, 10201, 10221, 10222, 10223, 10230, 10242, 10262, 10264, 10285, 10297,

10292, 10303, 10301, 10314, 10311, 10359, 10386, 10393, 10413, 10423, 10453, 10488, 10490
Utilization, Clinic, 10186
Utilization, Emergency Health Services, 09827, 09827
Utilization, Health Centre, 10115, 10201, 10221, 10262, 10311, 10393, 10453
Utilization, Health Services, 10190, 10196, 10221, 10234, 10242, 10297, 10301, 10314, 10311, 10359, 10386, 10393, 10413
Utilization, Hospital, 10052, 10230, 10292
Utilization, Maternal Child Health Services, 1030.., 10488
Utilization, Traditional Medicine, 10115, 10297, 10301

V

Vaccination, *See also: BCG Vaccination; Immunization; Vaccination Programme;* 09953, 09970, 09980, 09981, 09986, 09998, 10001, 10017, 10012, 10010, 10021, 10028, 10031, 10034, 10042, 10175, 10208, 10246, 10280, 10283, 10300, 10333, 10354, 10413, 10490
Vaccination Programme, *See also: Cold Chain; Immunization; Vaccination;* 09871, 09879, 09950, 09953, 09970, 09977, 09980, 10002, 10012, 10010, 10029, 10022, 10032, 10042, 10080, 10089, 10195, 10208, 10237, 10236, 10274, 10280, 10283, 10323, 10333, 10354, 10425, 10447, 10468
Village, *See also: Community;* 09850, 09857, 09925, 09929, 09937, 09997, 10053, 10061, 10071, 10078, 10070, 10074, 10082, 10118, 10115, 10112, 10116, 10111, 10165, 10180, 10187, 10190, 10207, 10213, 10225, 10228, 10221, 10226, 10235, 10273, 10272, 10289, 10314, 10319, 10326, 10335, 10340, 10343, 10346, 10392, 10397, 10393, 10399, 10404, 10400, 10405, 10415, 10417, 10434, 10488, 10495
Vitamin Deficiency, *See also: Nutrition; Xerophthalmia;* 09846, 09968, 09991, 10066, 10139, 10138, 10158, 10160, 10306, 10347, 10364, 10373, 10374, 10375, 10383, 10412, 10452, 10465, 10482, 10485
Voluntary Organization, *See also: Federation of Cuban Women; International Organization;* 09832, 10232
Volunteer, *See also: Health Manpower; Missionary;* 09850, 10061, 10071, 10070, 10142, 10251

W

Waste Disposal, *See also: Sanitation;* 09834, 09880, 09901, 10019, 10014, 10131, 10146, 10167
Water Supply, *See also: Construction, Water Supply; Environmental Health; Water Treatment;* 09803, 09834, 09835, 09880, 09901, 09908, 09924, 09930, 09957, 09987, 10013, 10019, 10014, 10071, 10084, 10088, 10131, 10130, 10134, 10146, 10153, 10161, 10167, 10191, 10238, 10259, 10273, 10346, 10392, 10467, 10477, 10495
Water Treatment, *See also: Environmental Health; Water Supply;* 09835, 09957, 10013, 10014, 10146, 10477
WHO, *See also: International Organization;* 09818, 09813, 09826, 09837, 09847, 09855, 09854, 09871, 09888, 09884, 09911, 09914, 09913, 09910, 09923, 09943, 09964, 09962, 09970, 09981, 10000, 10007, 10018, 10029, 10024, 10033, 10036, 10032, 10095, 10159, 10169, 10166, 10195, 10226, 10238, 10261, 10274, 10309, 10435
Women, *See also: Culture; Social Structure;* 09930, 09942, 09943, 09964, 09984, 09996, 10079, 10083, 10121, 10177, 10180, 10288, 10287, 10286, 10290, 10291, 10299, 10303, 10301, 10302, 10335, 10337, 10344, 10345, 10340, 10343, 10359, 10367, 10369, 10364, 10370, 10397, 10390, 10439, 10438, 10458, 10470, 10488, 10486, 10494

X

X-ray Technician, *See also: Health Manpower;* 10128
Xerophthalmia, *See also: Eye Diseases; Vitamin Deficiency;* 09846, 10151, 10160, 10465, 10482

Y

Yaws, *See also: Sexually Transmissible Diseases; Skin Diseases;* 10376
Yellow Fever, *See also: Infectious Diseases;* 10144, 10246
Yoruba, *See also: Tribes;* 10300

Geographic Index

(figures refer to abstract numbers)

A

Afghanistan, 10015, 10213, 10245
Africa, *See also: regional name(s), e.g., East Africa and specific country name(s);* 09826, 09823, 09831, 09864, 09866, 09876, 09877, 09899, 09892, 09914, 09928, 09929, 09920, 09932, 09934, 09931, 09948, 09944, 09947, 09988, 09997, 10005, 10003, 10014, 10018, 10086, 10123, 10154, 10152, 10162, 10216, 10226, 10248, 10247, 10246, 10320, 10475
Algeria, 10325
Angola, 10308
Argentina, 10360
Asia, *See also: regional name(s), e.g., Middle East and specific country name(s);* 09876, 09947, 09956, 10161, 10475, 10496
Australia, 09828, 10183, 10354, 10376
Austria, 09970

B

Bangladesh, 09845, 09846, 09878, 09923, 09985, 09982, 10099, 10116, 10190, 10207, 10324, 10327, 10336, 10331, 10400, 10426, 10453
Benin, 09961, 10184, 10211, 10303, 10489
Botswana, 09826, 09985, 10053, 10192
Brazil, 09820, 09963, 10000, 10055, 10072, 10110, 10201, 10250, 10292, 10317, 10323, 10332, 10334, 10356, 10350, 10360, 10470, 10493
Burma, 09911, 10237, 10417
Burundi, 09923

C

Cameroon, 09970, 10093, 10171, 10177, 10221, 10234, 10271, 10280, 10420, 10459
Canada, 09861, 09970, 10179, 10181, 10264, 10276, 10371
Caribbean, *See also: Latin America, West Indies, and specific country name(s);* 09870, 09984, 10114, 10117, 10133, 10217, 10422, 10471
Central America, *See also: specific country name(s);* 09807, 10446
Chile, 10186, 10195, 10204, 10309, 10466
China PR, 09813, 09819, 09829, 09838, 09834, 09973, 09993, 10041, 10194, 10229, 10245, 10244, 10360, 10379, 10429, 10433, 10496
Colombia, 10090, 10257, 10401, 10497
Congo, 09948, 10420
Costa Rica, 09905, 09911, 10419, 10429, 10432
Cuba, 09852, 09921, 10185, 10245, 10250, 10263, 10275, 10371, 10447, 10461, 10460
Czechoslovakia, 09849

D

Dominica, 10117, 10365, 10369, 10366
Dominican Republic, 10184, 10296

E

East Africa, *See also: specific country name(s);* 09841
Ecuador, 10297, 10298, 10348
Egypt, 10000, 10184, 10346
El Salvador, 09903
Ethiopia, 09824, 09886, 09939, 09987, 10206, 10309, 10302, 10355, 10360, 10372, 10398, 10416, 10429

F

Finland, 09911
France, 10042
French Polynesia, 10215

G

Gabon, 10436
Gambia, 10235, 10495
Germany FR, 09965
Ghana, 09859, 09924, 09940, 10121, 10224, 10243, 10272, 10299, 10467
Greece, 09923
Grenada, 10182
Guatemala, 09886, 09946, 10225, 10262, 10299, 10309, 10330, 10340
Guyana, 10281, 10390

H

Haiti, 09846, 09982, 10063
Honduras, 09949, 10075, 10189, 10256
Hong Kong, 10025, 10496
Hungary, 09970, 10309

I

India, 09830, 09846, 09862, 09874, 09886, 09906, 09900, 09938, 09933, 09945, 09952, 09961, 09971, 10016, 10022, 10059, 10066, 10060, 10077, 10074, 10088, 10082, 10104, 10100, 10124, 10138, 10161, 10188, 10193, 10199, 10208, 10210, 10225, 10228,

10245, 10243, 10287, 10286, 10294, 10309, 10315, 10320, 10326, 10338, 10335, 10344, 10345, 10343, 10348, 10360, 10367, 10385, 10397, 10399, 10408, 10403, 10402, 10415, 10429, 10455, 10468, 10478, 10485, 10484, 10486, 10494, 10490
Indonesia, 09811, 09812, 09839, 09846, 09857, 09882, 09896, 09890, 09922, 10019, 10038, 10039, 10043, 10106, 10115, 10131, 10200, 10205, 10209, 10220, 10222, 10227, 10230, 10236, 10274, 10306, 10305, 10307, 10314, 10312, 10349, 10358, 10362, 10361, 10368, 10374, 10386, 10387, 10382, 10381, 10383, 10384, 10391, 10396, 10404, 10405, 10412, 10430, 10440, 10441, 10452, 10454, 10476, 10482, 10480
Iran, 09959, 10418, 10434
Iraq, 10316, 10319, 10393, 10488
Israel, 10250, 10429
Ivory Coast, 10071, 10373, 10410, 10458

J

Jamaica, 09848, 09984, 09982, 10087, 10114, 10217, 10299
Japan, 10007, 10496

K

Kampuchea, 09832, 10044, 10057, 10295
Kenya, 09836, 09948, 10049, 10079, 10120, 10219, 10348, 10378, 10388, 10465, 10464
Korea R, 10348

L

Latin America, *See also: regional name(s), e.g., Central America and specific country name(s);* 09807, 09858, 09876, 09870, 09917, 09947, 10007, 10011, 10030, 10076, 10116, 10185, 10257, 10371, 10475
Lebanon, 10359
Lesotho, 10277, 10464
Liberia, 10348

M

Malawi, 09908, 10184, 10284
Malaysia, 09890, 10025, 10065, 10111, 10145, 10429, 10481, 10487
Mali, 09911, 10151, 10318, 10429, 10428, 10427
Mexico, 09941, 09970, 09985, 10025, 10054, 10096, 10101, 10118, 10413
Middle East, *See also: specific country name(s);* 09926, 09992, 10032
Mozambique, 09804, 09824, 09907, 09911, 09923, 10406

N

Namibia, 10045, 10211
Nepal, 09982, 10184, 10196, 10290, 10370, 10394
Netherlands, 09835
Nicaragua, 10128, 10149
Niger, 09929
Nigeria, 09821, 09844, 09877, 09886, 09968, 09967, 09977, 09989, 10002, 10025, 10047, 10078, 10070, 10083, 10097, 10122, 10127, 10187, 10191, 10225, 10245, 10267, 10300, 10309, 10301, 10352, 10425, 10431, 10437, 10439, 10438, 10442, 10457, 10477
North America, 09807

O

Oceania, 09880

P

Pakistan, 09883, 10081, 10095, 10147, 10294, 10322
Panama, 10463
Papua New Guinea, 09815, 09911, 09953, 09960, 10000, 10048, 10062, 10102, 10103, 10107, 10113, 10129, 10132, 10214, 10223, 10299, 10304, 10311, 10342, 10448, 10456, 10469, 10483, 10498
Peru, 09978, 10251, 10479
Philippines, 09828, 09843, 09846, 09872, 09893, 09894, 09890, 10004, 10000, 10068, 10073, 10080, 10203, 10239, 10241, 10240, 10265, 10274, 10273, 10289, 10309, 10364, 10429, 10474
Poland, 10218
Puerto Rico, 10268

R

Rhodesia, 09957
Rwanda, 09975

S

Sahel, 09899, 10360
Samoa, 10051
Saudi Arabia, 10351, 10411, 10500
Senegal, 09866, 09948, 10242, 10341, 10389
Sierra Leone, 09824, 09948, 10299, 10473
Singapore, 09890, 10197, 10337, 10363, 10414
Solomon Islands, 10424
Somalia, 10206, 10313, 10492
South Africa, 09814, 10045, 10052, 10233, 10255, 10269, 10407, 10472
South America, 09807, 09891, 10008, 10446
South Pacific, *See also: specific country name(s);* 10333
Southeast Asia, 09890, 09974, 10261, 10320
Spain, 09958
Sri Lanka, 09824, 09844, 10069, 10299, 10496
St. Lucia, 09924, 10392
Sudan, 09925, 09948, 10095, 10109, 10170, 10180, 10291, 10321, 10353, 10377, 10444, 10443, 10462
Swaziland, 10282
Sweden, 10309

T

Tanzania, 09826, 09844, 09841, 09936, 09948, 10040, 10058, 10148, 10140, 10155, 10216, 10245, 10465, 10491
Thailand, 09832, 09850, 09890, 09923, 09982, 10027, 10044, 10057, 10064, 10105, 10116, 10175, 10243, 10274, 10295, 10293, 10348
Togo, 09948
Trinidad and Tobago, 09984, 10380, 10449
Tunisia, 09994, 10329, 10339
Turkey, 10173, 10184, 10445

U

UK, 09970, 10000, 10299, 10360
Upper Volta, 09878, 10067, 10112, 10139, 10226, 10450
USA, 09833, 09832, 09897, 09915, 09970, 10042, 10055, 10174, 10178, 10176, 10212, 10250, 10266, 10265, 10371, 10463
USSR, 09816, 09827, 09865, 10198, 10270, 10357

V

Venezuela, 09825, 10252, 10328

W

West Africa, *See also: specific country name(s);* 10067, 10108
Western Pacific, *See also: specific country name(s);* 09888, 10051

Y

Yemen, 09911
Yugoslavia, 09970

Z

Zaire, 09840, 09851, 09928, 09927, 09948, 10046, 10278, 10309, 10310, 10348, 10395, 10420, 10421
Zambia, 09826, 09863, 10232, 10283
Zimbabwe, 09909, 09937, 09999, 10098, 10423

I have been unable to obtain a copy of the following work through my local library or bookshop. I request the help of the IDRC in procuring this material. Address coupon to: **SALUS Bibliography, c/o Micrographics Project, IDRC, Box 8500, Ottawa, Canada K1G 3H9.** *(Please type or print)*

VOLUME NUMBER _____
ITEM NUMBER _____ **PAGE** _____
AUTHOR/EDITOR _____
TITLE _____
I prefer ☐ microfiche ☐ photocopy (only of documents of less than 30 pages).
NAME & TITLE: _____
ORGANIZATION: _____
ADDRESS: _____
_____
_____

I have been unable to obtain a copy of the following work through my local library or bookshop. I request the help of the IDRC in procuring this material. Address coupon to: **SALUS Bibliography, c/o Micrographics Project, IDRC, Box 8500, Ottawa, Canada K1G 3H9.** *(Please type or print)*

VOLUME NUMBER _____
ITEM NUMBER _____ **PAGE** _____
AUTHOR/EDITOR _____
TITLE _____
I prefer ☐ microfiche ☐ photocopy (only of documents of less than 30 pages).
NAME & TITLE: _____
ORGANIZATION: _____
ADDRESS: _____
_____
_____

I have been unable to obtain a copy of the following work through my local library or bookshop. I request the help of the IDRC in procuring this material. Address coupon to: **SALUS Bibliography, c/o Micrographics Project, IDRC, Box 8500, Ottawa, Canada K1G 3H9.** *(Please type or print)*

VOLUME NUMBER _____
ITEM NUMBER _____ **PAGE** _____
AUTHOR/EDITOR _____
TITLE _____
I prefer ☐ microfiche ☐ photocopy (only of documents of less than 30 pages).
NAME & TITLE: _____
ORGANIZATION: _____
ADDRESS: _____
_____
_____